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FIRE ENGINEERING

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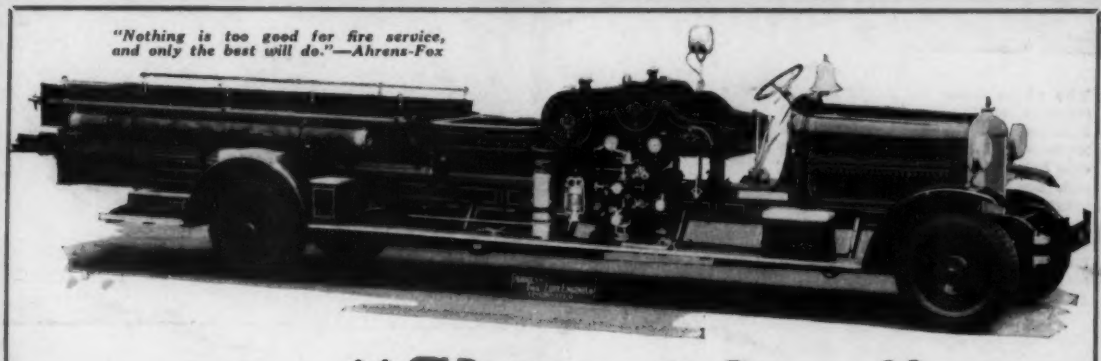
The Journal of the Fire Protection Profession

MAY 15, 1929

"Nothing is too good for fire service, and only the best will do."—Ahrens-Fox



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"Builders of Quality Fire Apparatus"

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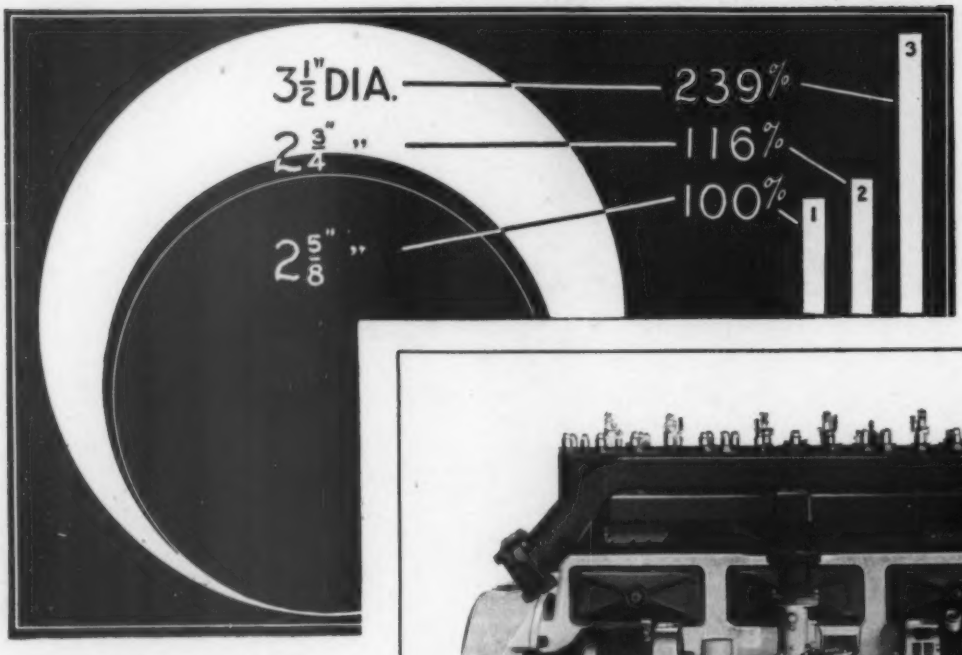
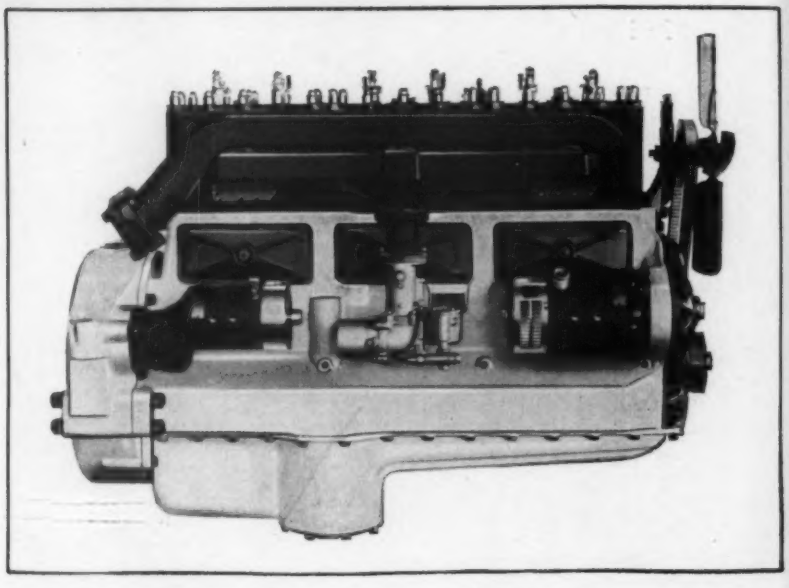


The above diagram shows crankshaft sizes—three of best-known fire pumpers, with diameters of 2⅝ in. and 2¾ in.—and Waukesha's crankshaft, 3½ in. All have 1000 gal. capacity. White lines show relative stiffness of the shafts. If shaft No. 1 is considered 100 per cent satisfactory, then shaft No. 2 has an excess capacity of 16 per cent and the Waukesha shaft, No. 3, has 139 per cent over capacity.



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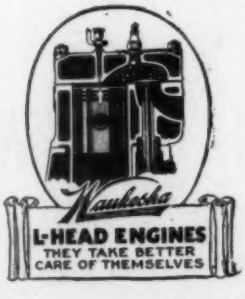

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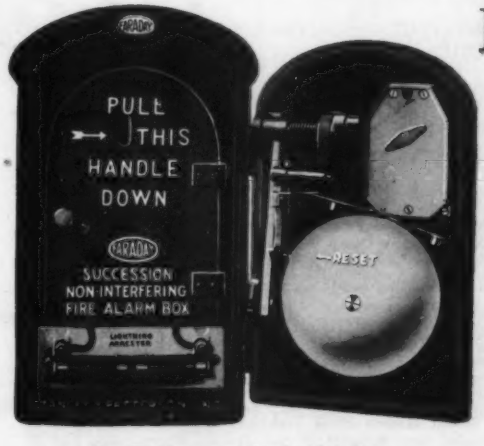

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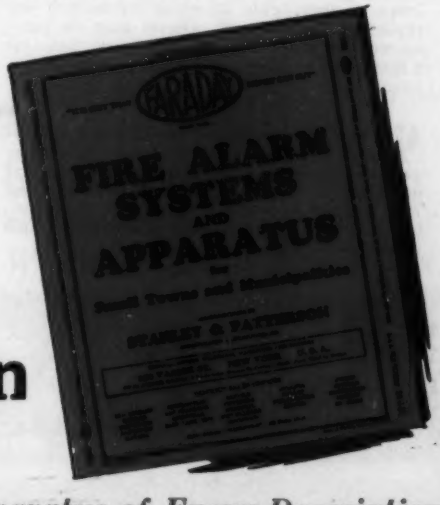

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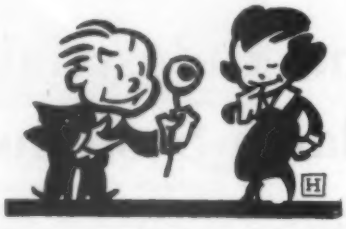

"What Could Be Sweeter?"

¶ *"I want to compliment you on the excellence of FIRE ENGINEERING" writes Chief Robert J. Benham of the Washington, Conn. Volunteer Fire Department. "It is far ahead of anything I have ever read in fire magazines and is certainly a paper every fire chief should subscribe for. Enclosed find my check for $5 to cover the renewal of my subscription for the next two years."*

¶ Thanks for the check and the kind words, friend Benham. The citizens of your community have reason to be proud that their safety against fire is in the hands of a man who keeps so thoroughly informed on modern fire protection methods and believes that the management of a fire department is more than just a matter of wearing a gold-braided parade uniform.

¶ The average volunteer fire department nowadays is getting to be a mighty efficient organization and often does things in a way that makes the big city folks sit up and take notice. Fire fighting is usually a hobby with the volunteer and what any man does as a hobby he always does wholeheartedly and well.

¶ Our editors have a lot of good stuff for coming issues of FIRE ENGINEERING of particular interest to the volunteer fire fighter. Don't miss it, whatever you do.

The Publishers

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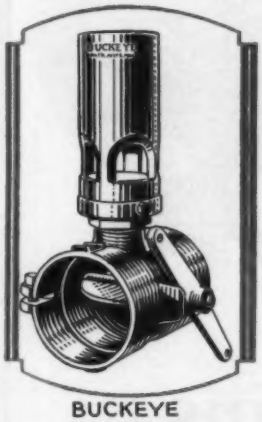
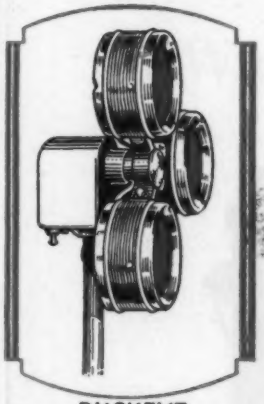
They can *HEAR* you and *SEE* you coming!



BUCKEYE WHISTLE



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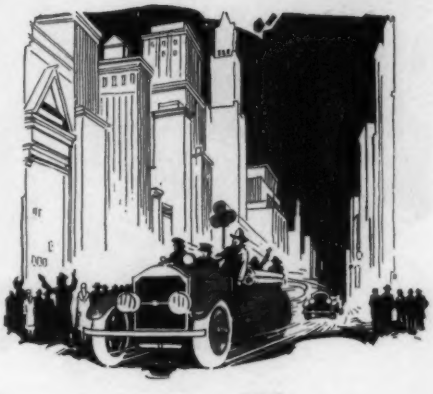

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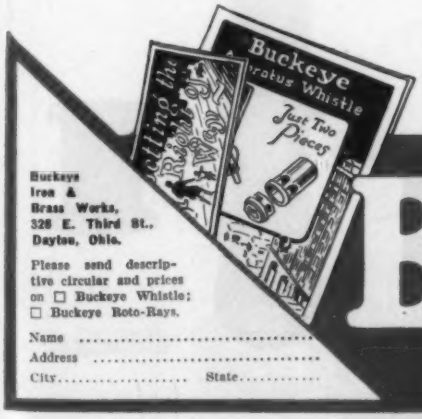

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Please send descriptive circular and prices on ☐ Buckeye Whistle; ☐ Buckeye Roto-Rays.

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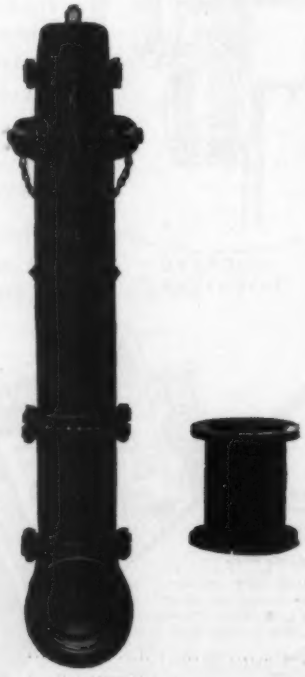
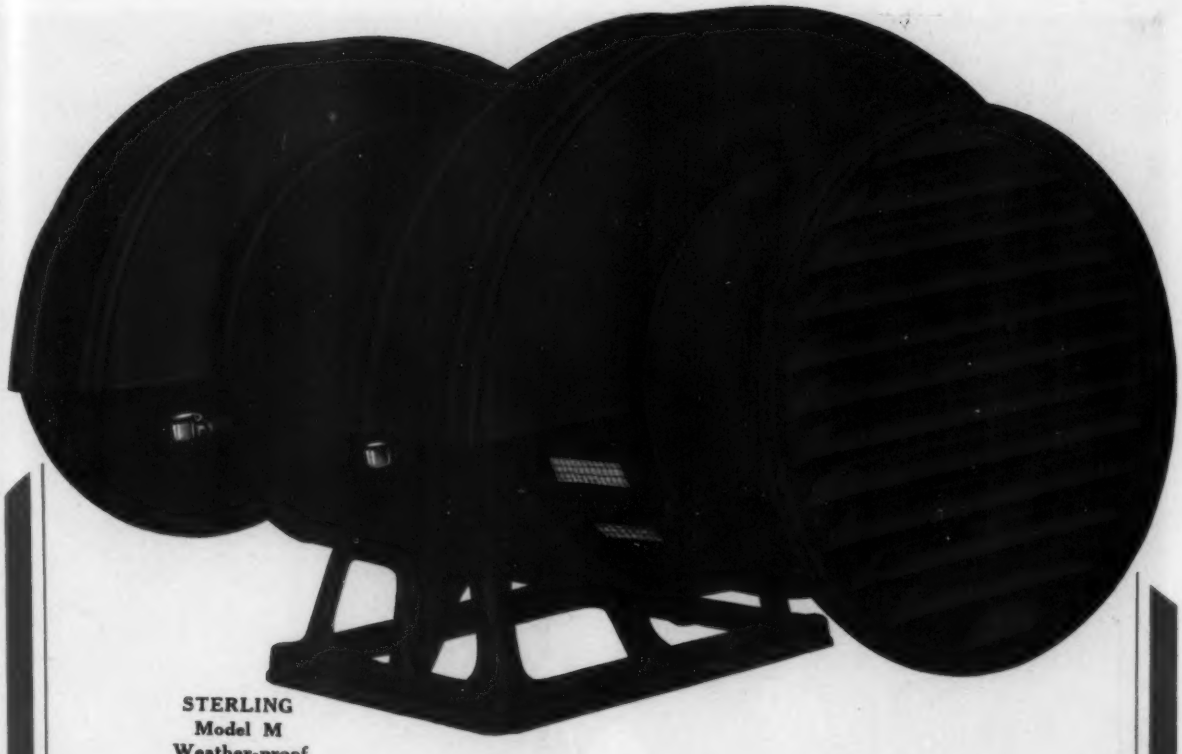


DARLING
FIRE HYDRANTS



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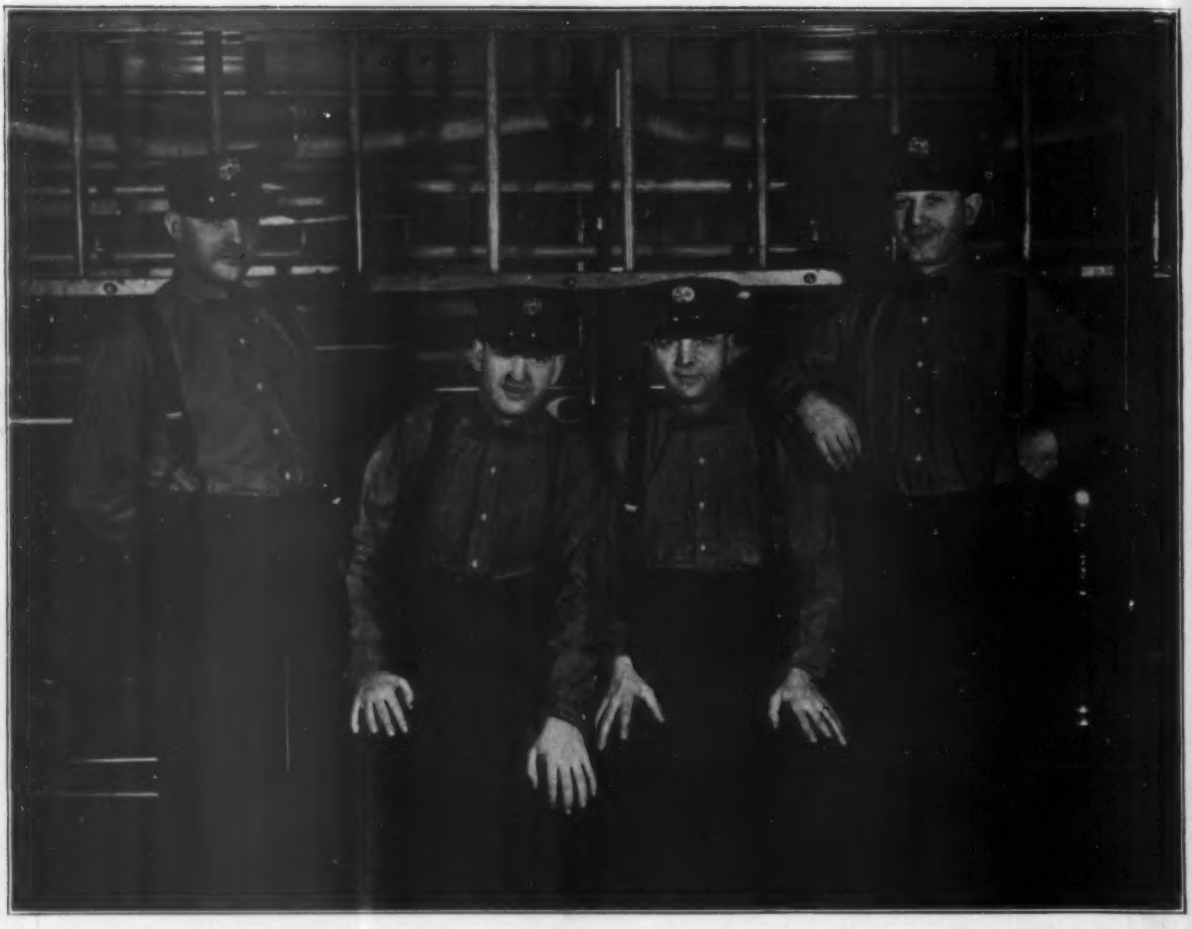

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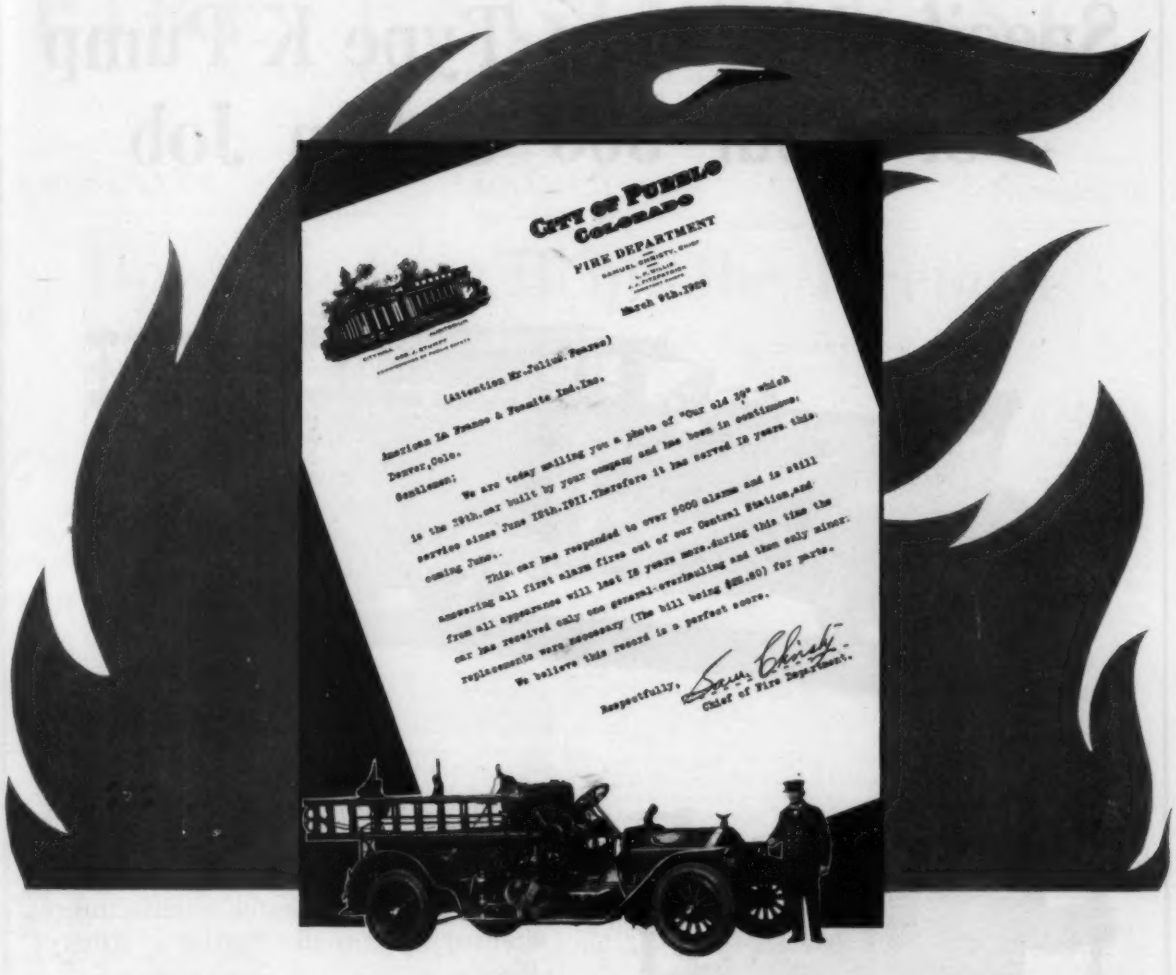
CITY OF PUEBLO
COLORADO
FIRE DEPARTMENT
March 9th.1929
(Attention Mr.Julius Pearse)
American La France & Foamite Ind.Inc.
Denver,Colo.
Gentlemen:
We are today mailing you a photo of "Our old 39" which is the 39th.car built by your company and has been in continuous service since June 12th.1911.Therefore it has served 18 years this coming June.
This car has responded to over 5000 alarms and is still answering all first alarm fires out of our Central Station,and from all appearance will last 18 years more.during this time the car has received only one general overhauling and then only minor replacements were necessary (The bill being $22.80) for parts.
We believe this record is a perfect score.
Respectfully,
Chief of Fire Department.

Battle-scarred but unconquered — this 18-year old veteran!

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Registered No. 39—one of the early pieces of apparatus built by American-LaFrance—was delivered to Pueblo, Colorado, on June 12, 1911. Chief Christy's letter tells the story of service given by "Our old 39". And in those 18 years of day-in and day-out service the cost of repair parts has amounted to only $22.80!

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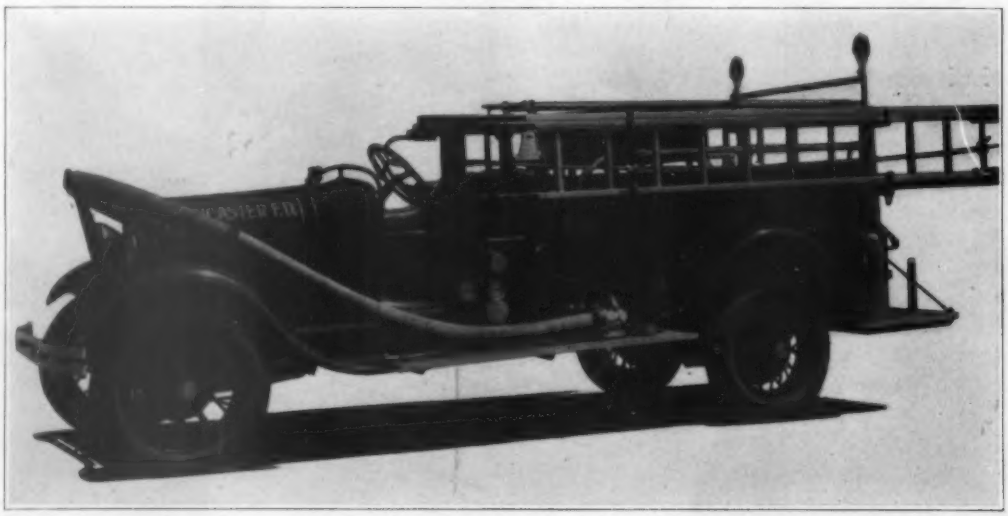

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152	202 lbs.	1710	623
102	255 lbs.	1290	470

If you need a new pumper and cannot afford a 500 gallon job—the Northern Type K Pump will solve your problem.

Write for complete information and names of Fire Apparatus Manufacturers licensed to install Northern Rotary Pumps.

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FIRE ENGINEERING

(A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER)

The Journal of the Fire Protection Profession

VOLUME LXXXII MAY 15, 1929 NUMBER 10

How the Law Helps the Fireman

Some Recent Cases Which Apply to Fire Departments and Fire Fighting — Important Decisions of Higher Courts

By LEO T. PARKER, Attorney-at-Law, Cincinnati, Ohio

FOLLOWING are some decisions of the justices of higher courts upon a number of important matters of interest to fire departments throughout the country. These cover a number of subjects that will be found helpful to chiefs and others:

Records of Fire Marshal's Investigations Not Open to Public Inspection

Generally speaking, state fire marshal laws impose upon the state fire marshal the duty of collecting statistics regarding the origin of fires. To this end, the chiefs of fire departments, the mayors of cities, the presidents of incorporated villages, and the town clerk of every township are required to investigate the cause, origin and circumstance of every fire occurring within their respective municipalities, and furnish the proper state fire official with a written report of all the facts relating to the cause and origin of the fire.

When deemed necessary, the chief fire official of some states, by himself or deputies, may conduct a further investigation and examine on oath, all persons supposed to be cognizant of any facts, or who have any means of knowledge in relation to the origin of the fire, cause the arrest of any person believed to be guilty of the crime of arson in connection therewith, and furnish the proper prosecuting attorney with all such evidence.

That the records of these investigations are not subject to public inspection is substantiated by the recent case of State vs. Freede, 223 N. W. 861. In this case the owner of a dwelling, which was destroyed by fire, sought to obtain information of the nature of the reports rendered by the fire marshal, because the former contemplated suing an insurance company for payment of an insurance policy and he was suspicious that the report may contain information to his detriment regarding the origin of the fire. It is important to know that the Court held the property owner not entitled to inspect the records stating important law, as follows:

"The various reports, correspondence, and examinations fade with reference to any particular fire carry no public interest, but statistics covering all fires, showing their causes, the facts and circumstances under which they originate, have an educational value, and this is what the Legislature intended to make available to the public. . . . It is well known that this law was passed upon the request of the insurance companies and that they are especially assessed for the funds necessary to administer the act. The manifest purpose of the law is to apprehend and punish those who may be guilty of the crime of arson, and to discourage the burning of property for the purpose of recovering the insurance thereon. If the testimony of all persons taken in investigations conducted by the state fire marshal of his deputies, for the purpose of discovering the origin of fires, were to be made a matter of public record, the attainment of the purposes of the law would be greatly embarrassed. . . . One accused of crime enjoys no right to an inspection of evidence relied upon by the public authorities for his conviction. . . . In view of these considerations, the legislative purpose to permit public inspection of papers and documents, such as relator seeks to inspect, should plainly appear."

Fireman Entitled to $10,000 Damages for Injury by Train

The law is well established that a railway company is liable in damages for injuries resulting from its negligence in failing to provide a watchman or flagman at crossings in violation of a city ordinance. Moreover, temporary absence of the flagman from his post is negligence on the part of the railway company.

For example, in Webb vs. Vicksburg, S. & P. Ry. Co., 119 So. 720, it was shown that a fire ladder truck was struck by a train seriously injuring the tillerman on the truck. In fact the evidence established that he had sustained a fracture of the skull, which caused him to be confined in a hospital for about 30 days, and had resulted in an impairment of his power to read and to speak to such an extent as to incapacitate him from returning to his employment, in which he received $1,500 per year.

The driver of the fire truck testified that, whilst returning from a fire, he approached the crossing at a very moderate rate of speed; that there was no flagman on the crossing; that he saw no moving car until just as he reached the track, when it was too late to stop or back off with his heavy ladder truck, 50 feet in length; that he then speeded up and swerved aside to avoid the on-coming car, which he did avoid, but in doing so the rear end of his truck struck the telephone pole and was wrecked.

In view of this testimony the Court held the fireman entitled to $10,000 damages because the city ordinance requiring the railway company to keep a flagman at the crossing had been violated. This Court said:

"Our conclusion from the evidence as a whole is that the flagman was not at his post, and that this, and not any recklessness on the part of the driver of the truck, was the direct

THE following legal questions are treated in this article: "Records of Fire Marshal's Investigations not Open to Public Inspection"; "Salary of Fireman Held Exempt from Garnishment"; "Fireman Killed by Burned Electric Wire"; "Fireman Entitled to $10,000 Damages for Injury by Train"; "Distinction between 'Pension' and 'Sick Benefit' "; "Meaning of Term of 'Shall have been in City Service,' " and "Duty of Property Owner to Prevent Fires."

cause of the accident. Since the city ordinance required that a flagman be at the crossing the driver of the truck had the right to assume, when no flagman appeared, that no train was approaching."

Salary of Fireman Held Exempt from Garnishment

In many instances, firemen, in order to obtain ready cash, assign their future wages to loan companies, and the creditors endeavor to institute garnishment proceedings to collect a portion of the former's salary.

Also, many states have enacted laws exempting the salaries of public officers from garnishment process.

Therefore, the recent case of Industrial Discount Co. vs. Ccherer, 119 So. 295, imparts unusually important legal information. The question presented the Court in the case was whether, under existing laws, the salary of a fireman, employed by the fire department in the city of New Orleans, is exempt from garnishment process.

The argument in favor of the exemption was that a fireman is a public officer, and that a state law exempts salaries of public officers from garnishment.

It is important to know that the higher Court in holding the fireman a public officer, whose salary is exempt from any legal attachment proceedings, said:

"The principle upon which a salary is paid to an officer is not that of a contract, or that of the laborer being worthy of his hire; for the citizen owes his services free to the state in the proportion in which the state stands in need of them. But it is that the man must live, and that, if service is expected of him, he must be supplied with the means of livelihood. The law which prescribes the mode and manner in which the officer shall be thus supplied is one beyond the control of the officer, which is not within his power to nullify by private contract with one of his fellows. . . . To deal with the matter as if the officer had a contractual right which he may bargain away is simply to misconceive the situation. The public in its own interest makes a certain regulation, and the officer is powerless to change it."

Fireman Killed by Burned Electric Wire

Generally speaking, an electric company is required by the law to exercise care to cut off the current from electric wires in close proximity to a fire.

The degree of care which will satisfy this requirement varies with the danger which will be incurred by its negligence to do so, and must be commensurate with the danger involved. According to numerous higher Court decisions, where the wires maintained by a company are designed to carry a strong and powerful current of electricity, so that persons coming in contact with them are certain to be seriously injured or killed, the law imposes upon the company the duty of exercising the utmost care and prudence to prevent such injury. This is especially true of high tension wires suspended over the streets of cities or towns.

For instance, in the recent case of Osborne vs. Tennessee Electric Power Co., 12 S. W. (2nd) 947, it was disclosed that a municipal company was notified that a burning building endangered its high tension wire and that the current should be shut off immediately. The company's employees did not arrive for one hour, and in the meantime one of the wires burned in two and killed a fireman.

The latter's dependents sued the electric company for damages. It is interesting to observe that the lower court held the electric company not liable but the higher Court reversed this verdict, saying:

"Where an electric company receives notice that its wire is down in the street it should instantly turn the current off and keep it off till proper precautions are taken to prevent danger to persons or property from the fallen wire, and until it is ascertained that it is safe to turn it on."

Distinction between "Pension" and "Sick Benefit"

In many instances various laws regulating payment of pensions and benefits to disabled and sick firemen are quite conflicting.

Therefore, the recent case of State vs. Barry, 272 Pac. 677, should present unusually valuable information on this subject.

(*Continued on page* 428)

Housing Needs of the Small Community

Small municipalities, villages and borough governments, have different fire department housing needs than those of the larger cities. The alarms received are fewer, and the fire house, for economic reasons, must serve other departments as well. It is not uncommon to find that a fire house is being used for a recreation center, town hall, police court, and even for a school house.

At Clarion, Pa., a combined town hall and fire house is being erected. The ideas incorporated in its design may be of value to other sections confronted with similar problems.

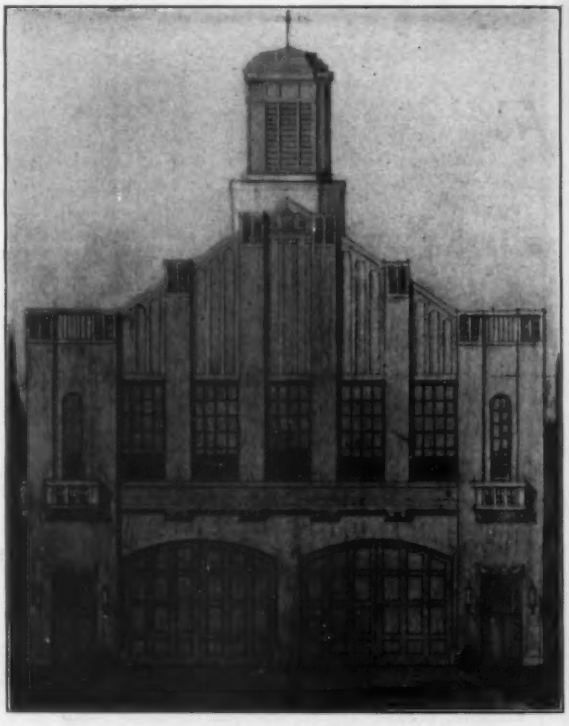
The building will cover an area forty feet by seventy feet. The house will be of buff brick with terra cotta and stone trimmings. The front elevation of the building is illustrated.

The large double doors enter directly on the apparatus floor. Entrance to this room may also be gained by either of the side doors. The apparatus doors open by being raised until they are flat underneath the ceiling. This room is thirty-two by fifty-four feet.

The small door at the left opens to a hall leading to the second floor. A toilet is under the stairway. There is an emergency stairway at the rear of the apparatus floor. The entire first floor is to be finished with light yellow brick. The radiators are to be set in the wall to conserve space. The first floor ceiling height is twelve feet.

The building will stand twenty-one feet back from the sidewalk.

On the second floor is to be the office of the council, eighteen by twenty-four feet; a firemen's club room, sixteen



Photo, Courtesy of the Clarion Democrat.

Municipal Hall and Fire House for Clarion, Pa.

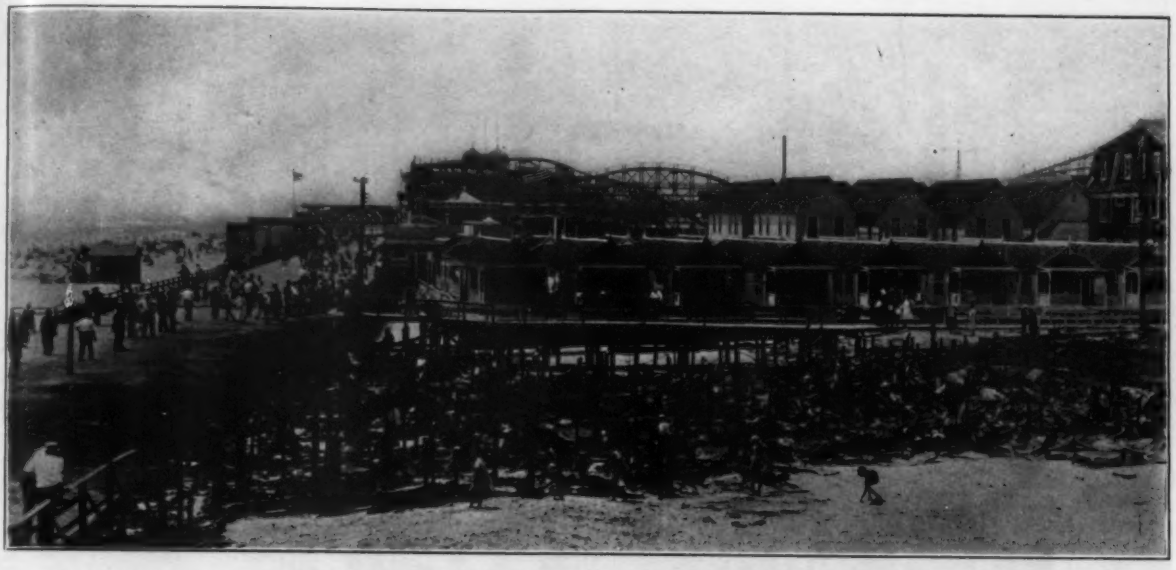
by thirty-two feet; billiard or game room, twenty-one by twenty-four feet, and back of this room will be a kitchen. On this floor will also be shower and locker rooms, and a drying room. Walls on the second floor are to be plaster, finished with a sand effect.

The roof is pitched at about forty-five degrees and is supported by steel and framework. Specifications call for asbestos shingles. Near the front of the roof will be the belfry, in which will be mounted an electric siren. The fire bell may also be mounted here to serve as an auxiliary means for sounding an alarm.

At the back of the station will be the town jail, and next to this will be the hose drying tower, capable of holding 1,500 feet of hose.

The Clarion, Pa., department was organized fifty-three years ago. A party was held this year to observe its anniversary.

Up until 1919, hand hose carts and other light equipment were used. The company was reorganized, and with the aid of both council and public, two motor-driven pieces of apparatus were purchased. The department has adopted the phrase, "the livest organization of strictly volunteer firemen in western Pennsylvania." It is mainly through the efforts of the firemen that this new building is to be erected.



The Amusement Resort Fire Usually Does a Complete Job

Here is all that is left of one of the amusement enterprises located at the oceanside near New York City. Interspersed between the various amusement devices are rows of frame cottages which add more than little to the work of the department in the event of fire.

Structures that are Built to Burn

Amusement Resorts Include Most Inflammable Types of Construction — Suggested Methods of Handling Fires

IF there is a more troublesome fire to handle, involving large quantities of wood, than the lumber yard fire, it is the amusement resort fire.

Such resorts, being usually used for but a short season of the year, and hence producing revenue only for a period of a few months, do not warrant expensive construction. As a result the very cheapest and the most highly inflammable materials are employed in their construction.

Unlike lumber piles, the structures found in amusement resorts reach great heights with the result that once a fire starts the department has an extremely difficult task on its hands. Flimsy frame structures, sheathed with wood, and a considerable amount of sub-structure involving the use of papier-mache, painted canvas and similar materials, make a very fast spreading fire once it starts.

If the resort is located on the water front, the additional hazard of having many of the buildings set on spiles, together with boardwalks running through the entire resort, add to the fast travel of a fire and the difficulties the department has to face.

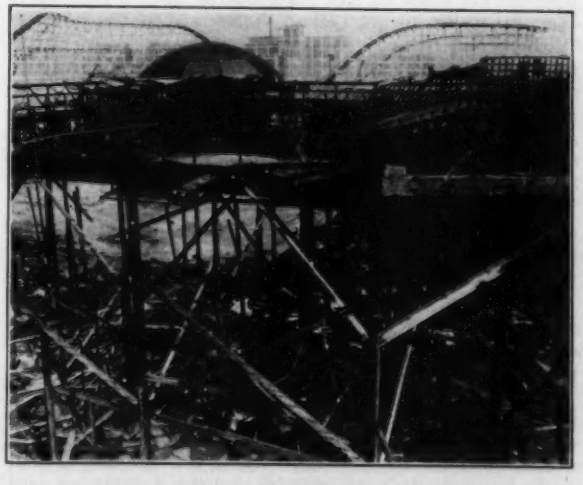
The season of operation, while being short, is usually very busy and careful housekeeping is the exception. Careless use of cigarettes, cigars and matches often provide the start of many such blazes.

Where roller coaster and similar amusement devices are at hand, great quantities of waste paper will be found beneath them on the ground. It requires only a carelessly tossed cigarette over the side of one of the roller coaster cars to start the blaze going.

Suggested Methods for Handling Fires

The handling of the average resort fire requires big streams and plenty of them. But the resorts are either so located as to be on the outskirts of the town or away from the maximum protection of the local department. In such cases, the department usually has to operate at a severe handicap, for the number of companies immediately available is small. To call additional companies means having them travel considerable distance, and if roadways are at all congested with traffic, the resort would likely be wiped out before sufficient help could reach the scene. Thus it is a question of operating on the fire with limited facilities, with the hope of holding and extinguishing it.

Big streams are absolutely necessary. One large stream is worth half a dozen smaller ones. The height of the structures encountered, the large area which must



Burns Like a Forest Fire but Faster

Because the wood employed is dried out, and because of the inflammable covering usually placed over amusement resort structures, fires therein travel with great rapidity and unless the department operates with speed, nothing but ashes may remain.

The Resort Fire Usually Gets a Good Start

Because of flimsy construction, amusement resort fires usually gain considerable headway before the first companies of the department arrive. Here is one of the buildings of the Midland Beach layout on Staten Island, New York, ablaze at a fire which occurred the 5th of this month. The fire started in a wooden bath house and involved such attractions as "Barrel of Fun," "The Old Mill," "Penny Arcade," a restaurant, a ferry slip, four soda stands and a general office building. The loss at this fire totalled nearly a quarter of a million dollars.

be covered, and the intensity of the heat all make such streams indispensable.

One pumper can well supply one large stream, which may be manipulated with play pipe and stick or other suitable holder.

Operations should be carried from the lee side of the fire, if at all possible. Stretch in two lines from each of the first two companies, putting on inch and a half tips, one company to take each side of fire. Order sufficient pressures to get 70 to 90 pounds at the nozzles. With these streams, it is possible to sweep over a large area. It does not require great volume of water to cool the burning materials off, but rather a quick dash. If it is found that the heat is getting intense at the point of operation of the department, and there is a possibility of fire jumping across the company's to adjacent property, streams may occasionally be directed vertically. When so directed, if the fire is being driven by the wind toward the companies, the spray from the streams will be carried by the wind and will aid in wetting down exposed property. Remember, it is a question of fast work at a fire of this type. The damage is usually done in a half hour or less. The success of the department's efforts are likely to be determined within the first five minutes of operation.

After the fire has been wiped over by heavy streams it will be found that a great deal of the fire has been darkened. However, the fire is by no means out, for if permitted to burn beneath roofs for a few minutes it will again burst forth in all its fury and the department will again be faced with its original task.

After heavy streams have been gotten into operation at the lee of the fire, attention will have to be given toward getting smaller streams into the various structures or under them, to finish up the work which the large streams start.

Use Deck Guns

If the department has wagon pipes available, they should be brought into play at the start, for they afford a means of readily directing streams in all directions and

The Audience Is Always There

Where an amusement resort fire takes place during the daytime, immense crowds are apt to collect, much to the inconvenience of the firemen. Police lines are indispensable, but are hard to maintain.

make possible the use of high pressure not safe where hand lines without proper holders are employed. In placing the wagon pipes they should not be placed immediately in the path of the fire, but on the edges of the apparent path of travel so that in the case of an emergency, they can be backed out of danger. One

(*Continued on page* 418)

THE ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

EACH fire has a question that must be answered in the best way possible: "What caused it?"

Most blazes are caused by incidents that are purely accidental, a few are unexplainable, and a small percentage are prompted by incendiary motives. A large number of incendiary fires gives the fire department a poor record for it shows that the officer in charge is not aggressive.

Incendiary fires are prompted by a spirit of revenge, a desire to cover some kind of crime, or an attempt to collect insurance. The last reason is the more common. Over-insurance and business reverses are the chief causes for "selling out" to the insurance companies.

The danger of such fires is that if the first attempt to defraud is successful, others will follow as rapidly as local conditions warrant.

When planting a fire, the arsonist wants to do his job well and to get it over quickly. Large amounts of highly inflammable material are placed about strategic points in the building so that the entire building will become involved. Given adverse weather conditions such as a high wind, and possibly poor water supply at the time, the fire has a good opportunity to spread to nearby property, and affect some innocent resident.

Even more serious than this, is the life hazard. It is not uncommon to read of persons being burnt to death during the night by a fire that was believed to have had incendiary origin.

All of this clearly indicates that the chief should have a direct interest in the problem. He is appointed head of the department to guard the lives and property of those residing within the city limits. The chief can do this by a program of preventative work—stopping incendiary fires before they occur.

One chief makes it a practice to investigate the past record of all new residents. He writes to the head of the department from which the person migrated, and if the chief there believes the person responsible for fires of doubtful origin, the record is passed on. The newcomer is politely told that his presence in the town is not desired. And according to reports received, the plan has worked.

In a New England city, a complete record is kept of all fires and of each person having a fire. A colored card is used if the fire is at all suspicious. Department officers then have a complete history which may be of value in court cases.

But these are only a few of the methods employed to meet the problem brought to the fore by the arsonist. The problem in full is printed in the box on this page. At the head of the following page is the question that will be treated in the next issue. Should you have some comments that you would like to make on the next problem, or if you have a question that you would like to see treated in this department, write to the "Round Table Editor," FIRE ENGINEERING, 225 W. 34th St., New York, N. Y.

Since this department was inaugurated, fire department officers have written in to say how valuable it has proved as a feature. As a suggestion, therefore, a looseleaf binder containing the round table features printed in each issue, will develop into an encyclopedia of practical experience articles—plans that have been tried out by efficient chiefs.

Here is the Problem

What steps do you take to prevent incendiary fires? Have they proven effective?

The Question

This is the second and concluding installment of the problem that was printed in the May 1 issue. So many contributions have been received in answer to the incendiary question, that it was necessary to do this. Chiefs stress the importance of prompt and complete investigation of all fires, and of the value of assistance by police departments and the fire marshals. The discussion follows:

S. A. Boaz, Chief, Henryetta, Okla.: We have found it impossible to convict anyone in this county for arson. As a matter of fact, this same condition has existed over the entire state. I have endeavored, by use of newspaper articles, to show that insurance agents are responsible for a great many of these fires by over-insuring property. While this method has helped in making some of the agents more careful, others are only concerned with what they receive in cash and not with the results of over-insurance.

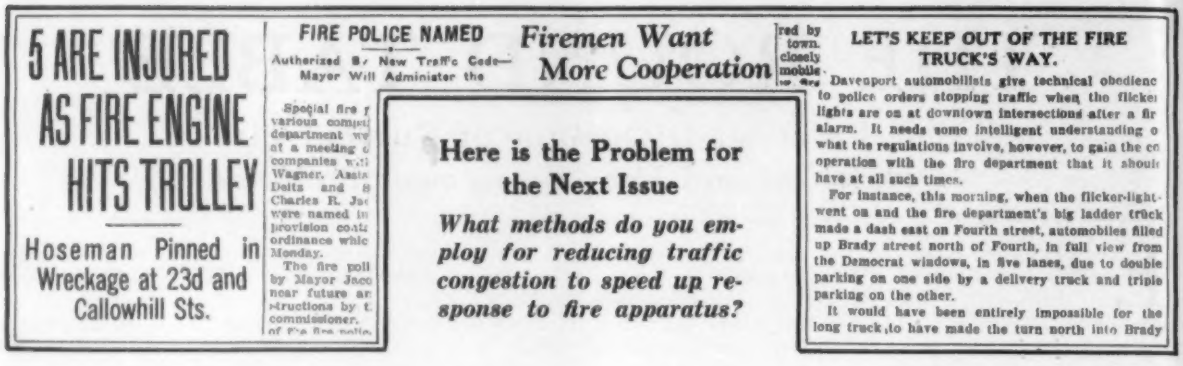
The Oklahoma Fire Chiefs' Club discussed this question a year ago and came to the conclusion that the only way to get any relief was to have the law changed. As a result, we, in cooperation with the state fire marshal, are presenting a bill to the state legislature asking that all prosecution of arson cases be taken from the county attorneys and be placed in the hands of the arson branch of the state fire marshal's office. This branch will have a special attorney to prosecute all such cases.

W. G. Lutkey, Chief, Oakland, Calif.: Every fire is investigated by an inspector of the Fire Prevention Bureau. This preliminary inspection is made to check up on the insurance, the values involved and the loss on same. These investigations have brought to light many irregularities in occupancy and defects in construction which are ordered remedied. A final inspection is made to see that these conditions have been corrected.

If it be apparent that a fire is of incendiary origin, the battalion chief in charge immediately notifies the fire marshal and also the arson inspector of the police department. A hoseman is left in charge of the premises until the arrival of either of these men at which time they take charge of the investigation.

During 1928 thirty-two suspicious fires were investigated. Three convictions were obtained and these parties are now serving terms in the state prison. One of the three convicted persons confessed to about six of the thirty-two fires. He is a young man not yet eighteen years of age.

Chris W. Noll, Chief, Poughkeepsie, N. Y.: The following is a section of our Fire Prevention Ordinance. This was put into effect June 22, 1928, as a means of preventing incendiary fires.



5 ARE INJURED AS FIRE ENGINE HITS TROLLEY

Hoseman Pinned in Wreckage at 23d and Callowhill Sts.

FIRE POLICE NAMED

Authorized By New Traffic Code—Mayor Will Administer the

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Firemen Want More Cooperation

Here is the Problem for the Next Issue

What methods do you employ for reducing traffic congestion to speed up response to fire apparatus?

red by town. closely mobile

LET'S KEEP OUT OF THE FIRE TRUCK'S WAY.

Davenport automobilists give technical obedienc to police orders stopping traffic when the flicke lights are on at downtown intersections after a fir alarm. It needs some intelligent understanding o what the regulations involve, however, to gain the co operation with the fire department that it shoul have at all such times.

For instance, this morning, when the flicker-light went on and the fire department's big ladder truck made a dash east on Fourth street, automobiles filled up Brady street north of Fourth, in full view from the Democrat windows, in five lanes, due to double parking on one side by a delivery truck and triple parking on the other.

It would have been entirely impossible for the long truck to have made the turn north into Brady

"The Chief of Fire Department shall investigate the cause, origin and circumstances of every fire occurring in this city, by which property has been destroyed or damaged, and so far as possible shall determine whether the fire is the result of carelessness or design. Immediately upon the occurrence of such fire, such investigation shall be begun by the Chief of Fire Department who shall take charge of any physical evidence. He shall notify the Chief of Police and the Building Inspector, who shall assist in the investigation and prosecution of the case."

We have had only one fire that appeared to be of a suspicious nature. The District Attorney's office is at the present time investigating this case in an endeavor to secure evidence. There is every indication that a warrant for the arrest of the guilty person will be issued in a very short time.

John W. McCarthy, Chief, Corning, N. Y.: The origin of every fire is investigated and where a fire appears to be of a suspicious nature, a thorough investigation is conducted and any information secured is turned over to the police department.

In several cases, the evidence has been turned over to the investigating bureau of the National Board of Fire Underwriters and an investigation has been made by them.

Even if there is no conviction, I believe that the publicity given by the newspapers following a fire has a tendency to prevent future incendiary fires.

I am also convinced that fire prevention as taught in the schools has a moral effect on the students and acts as a deterrent when it is sufficiently instilled in their minds. However, there are the grudge fires, and those started to collect insurance and in these cases even the law does not seem to act as an influence on those contemplating this crime.

Thomas H. Mahoney, Chief, Westfield, Mass.: We have had several fires which to all appearances were incendiary fires. Such fires are immediately turned over to the state fire inspector in this district for investigation, together with all the data we have been able to secure. A check-up is made and if sufficient evidence is secured, the case is brought to court in an endeavor to bring about a conviction.

In the past ten years we have had four cases which I am personally convinced were incendiary fires. The last of these occurred in December of last year.

Wm. D. Horne, Chief, Millbury, Mass.: We have been very fortunate in regard to incendiary fires. There have not been more than two fires, the origin of which was doubtful. Consequently we have never bothered taking any definite steps regarding incendiary fires.

It seems to me, however, that offering a reward for the arrest and conviction of anyone setting a fire of this kind there would serve an incentive for the public to supply evidence.

T. E. Fowler, Chief, Joplin, Mo.: In cases where we have been informed that there was a possibility of an incendiary fire, we immediately reported same to the insurance inspection and adjustment bureau. They check up on the amount of insurance and merchandise and if they discover that the merchandise is over-insured, the amount is cut down or the policy cancelled.

We had an instance a short time ago where the insurance company cancelled the insurance of a used tire shop because of over-insurance. Since that time they have not been able to re-insure the property. It was discovered that these people had had fires in Kansas City and St. Louis.

P. H. Hannan, Chief, Creston, Iowa: The cause of every fire is investigated immediately upon the arrival at the scene of the fire. People in the neighborhood are more likely to talk then than they will later on when they learn that arson is suspected. Suspicious fires are taken up with the state fire marshal and while it is not easy to secure convictions, I believe these investigations have a definite effect on the suspected person's conduct in the future.

Wm. S. McLoughlin, Chief, Bayonne, N. J.: It is my opinion that a chief and the men in his command have performed their duty when they have extinguished a fire. If any evidence is found that would show the fire was of an incendiary nature, we call upon the police to investigate, the chief being in command to assist in any way possible.

We have asked and received the assistance of the National Board of Fire Underwriters to the extent of holding up payment of fire losses in such cases. I believe when it is made difficult to get an adjustment it has a tendency to prevent the act.

John Gibson, Chief, Mount Vernon, N. Y.: We have found the best method of preventing incendiary fires is to have the insurance company withhold payment of the insurance as long as possible. This has served to discourage contemplated fires by those in need of money.

The insurance agents and adjusters have cooperated with us very well in this matter.

Investigating all fires of a suspicious nature has also had the desired effect in reducing the number of incendiary fires.

Wm. Bates, Chief, Elyria, Ohio: A thorough investigation is made at once by the fire chief. A request is also made to the state fire marshal for an assistant to help investigate the matter.

If no conviction is secured, the investigation at least has a good moral effect and for that reason this city has been fortunate in being free from suspicious fires.

S. T. Green, Chief, Gadsden, Ala.: When a fire occurs that seems unsual or that might have been started purposely, I immediately notify the State Fire Marshal at Montgomery. The matter is investigated by him in an endeavor to locate the guilty party. This seems to keep fires, other than accidental, down to a minimum.

L. R. Morris, Chief, Ames, Iowa: A thorough investigation is made of all fires that appear to be suspicious. In many instances I have called on the State Fire Marshal to assist in investigating the matter.

The public is aware of the fact that investigations are made and I believe this helps a great deal, as arsonists, in many instances, are afraid of taking the chance and being caught.

A. Howard, Chief, Ogdensburg, N. Y.: Up to the present time we have not had to take any steps to prevent incendiarism as we have never had any such fires, to my recollection, since I have been chief.

Geo. B. Holst, Marietta, Ohio: I report all incendiary fires to the State Fire Marshal. Although it has been very evident in many cases that the fire was set, we have been unable to secure any convictions.

E. Seymour, Chief, Plattsburgh, N. Y.: There is no definite action taken by this department, other than advising the insurance agents not to place insurance on property

(Continued on page 422)

What Should Modern Rules Include?

Rules and Regulations for House Watch Duty Considered in this Installment—Fifteenth of Series

IN this installment of the series of articles on the rules and regulations of fire departments are considered the rules pertaining to house watch duty. There are fifty-one rules regulating this duty, as compared with forty-five rules for fire alarm telegraph operators and eighteen for fire alarm telegraph linemen, considered in the last issue of FIRE ENGINEERING.

In thirteen of the forty-one departments considered the following rule is incorporated:

"There shall be kept in all company houses a continuous apparatus floor watch. Commanding Officers in charge of Company quarters will make floor watch assignments."

Eleven of the forty-one cities considered incorporate the following rule:

"The house watchman shall have charge of the Company day book during his watch, and shall make all necessary entries therein unless otherwise provided by the officer in charge of the company, provided, however, that he shall make no entry therein of any accident or injury to a member, or any other unusual or important occurrence during said watch without first calling the attention of the officer in charge of the company to the same."

In ten of the forty-one departments the following rule is enforced:

"The house watch shall see that everything in the apparatus room is in its place and in proper order."

Eight of the departments consider the following three rules essential:

The house watch shall be responsible for the proper receipt and transmission of all telephone calls received during the period of his watch; he shall talk loudly and distinctly announce the box number and location from which bell alarms are received and in case of still alarms, he shall immediately sound the still alarm call."

"The house watchman shall not permit visitors after 10 o'clock at night, except by order from the officers in charge."

"It shall be the duty of members to treat the house watch with respect and consideration stating by whose permission they leave the quarters; they must report to the house watch upon their return."

Seven cities have incorporated in their rules and regulations the following three rules:

"The house watchman, while on duty, will be responsible for all blackboard and other records pertaining to the fire alarms, streets, hydrants and other matters of department interest which may be reported to him during his tour of duty."

"Member going off watch will call his relief at the proper time and then return to the watchroom where he will remain until his relief has reported for duty. Watch reliefs shall, upon being awakened or called, report as promptly as possible to watchroom."

"The house watch shall not leave quarters without the permission of the commanding officer; shall not doze or sleep; shall not permit any violation of the rules, laws, or orders on the apparatus floors or elsewhere, nor in front of stations; in case he is unable to control any disorder he shall call the commanding officer."

Out of the forty-one cities only six require this rule:

"The house watch shall have command of the apparatus floor and be responsible for everything subject to the orders of the commanding officer, and shall carefully take notice of any misconduct on the part of any attache, whether officer or private. This duty must not be evaded by absence."

Only four cities enforce the following four rules:

"It shall be the duty of the floor watch during his tour of duty to see that no unauthorized person tampers with apparatus or department property."

"The tours of duty for floor watch shall be equally divided among the members of each company and a duty roster shall be posted for that purpose. All details for watch duty shall be made by the company commander."

"The house watch shall rise and salute upon the appearance of any commissioner or an officer, names of all visitors to parts of the building other than the first floor shall be entered on the record book."

"The house watch shall receive all visitors courteously; he shall keep constantly alert; he shall allow no intoxicated or otherwise undesirable person to enter or remain in the station; he shall allow no violation of the rules and regulations; he shall notify the Fire Alarm Operator of the arrival of the Chief, Deputy Chief, or District Chief, also of their departure."

Three cities have incorporated the following three rules:

"It shall be the duty of the house watch to see that all unnecessary lights are extinguished after 10 o'clock P. M."

"Unnecessary use of independent equipment is prohibited. The city telephone must, when in service, be used at all times for departmental information."

"No member while on house watch shall sleep or lounge or recline in a position to indicate sleep during his tour of duty as house watchman."

These eight rules are enforced in two of the departments:

"The house watch shall not permit any person to enter for the purpose of canvassing or soliciting orders, without the approval and consent of the company commander or Dept. Chief, except same be inconnection with the business of the Dept."

"Female visitors, unaccompanied by male escorts will be permitted to enter the company quarters as far as the patrol desk only. They shall then state their business. Entry of same on the record book shall be made."

"Members assigned to watch duty shall place their name on record, time of watch, and keep a correct list of calls received, which records will be preserved by office in charge. The names of all members and time of watch shall be kept in the daily record."

"Members on watch duty when answering telephone will answer by giving title, name and number of company."

"The details for house watch shall enter upon the discharge of their duty promptly at the minute named, being called by the housewatch ten minutes before such time, and shall be properly uniformed and prepared five minutes before going on duty. Both the detail to be relieved and the detail about to go on duty will be held responsible for the accuracy of the record in the journal while the change is made."

"When an apparatus, a hydrant, a bridge of a street is reported out of service, or any extraordinary department business takes place, the house watchman shall immediately notify the commanding officer of the full particulars of same."

"Any member detailed for watch duty shall at all times be within three feet of the telegraph or telephone instruments, and if same be enclosed by a railing, he shall remain therein while on duty."

"Whenever, after one alarm has been received from any box, a second or greater alarm is received from the same box, or single alarms are received from one or more additional boxes, the house watchman shall immediately call the Commanding Officer of the company in order that he may supervise the pegging on the record board."

The rules which follow have been found listed in but one city each:

Fresno, Cal.

"Each shift shall be divided into not less than five watches each. No watch except officers' watch to exceed three hours."

"At each change of shift the officer in charge of the off-going shift together with the officer in charge of the oncoming shift will each sign the company day book. This will constitute an acknowledgement by the off-going Company Officer of responsibility for the entries and in the case of the

oncoming officer, will constitute the acknowledgement that he has read the day book entries of the off going shift and understands them clearly so far as they have reference to his shift."

Denver, Col.

"The day watch shall be participated in by all company officers and members."

"The night watch shall be participated in by company officers and members, provided however, that in companies of ten men or more, the officers shall be exempted from such duty."

"The night watch shall be permitted to sleep on a cot provided for that purpose, but failure to respond to a telephone alarm or message will be followed by a reprimand from their assistant chief and a repetition of the offence will subject the offender to trial on the charge of neglect of duty. No portion of the regulation uniform need be worn while on night watch duty."

Waterbury, Conn.

"The Captain or Commanding Officer of each company shall detail a member for night watch whose duty it shall be to report promptly at the prescribed time, properly uniformed, and who shall take his place at the allotted spot at least five minutes before roll call takes place. Both the detail about to be relieved and the detail about to go on duty shall be held accountable for the accuracy of the record book while the change is being made."

Portland, Me.

"At the Central Station the watch shall be for twenty-four hours."

"Between 10 A. M. and 9 P. M. the man on house watch duty shall be in full uniform. He shall see that floor apparatus is properly closed at 9 P. M. He shall not engage in games with others during his period of watch."

New Orleans, La.

"Each tour of house watch duty shall be performed by one member with the exception of tours from (12) midnight, to 2 A. M., to 4 A. M., which shall be performed by two members to be designated as house watchmen respectively. From 4 A. M. to 6 A. M. the Captain or commanding officer will also designate two members to perform the duties of house watch."

Baltimore, Md.

"Coats must be worn and buttoned up while on watch from Sept. 15th to June 1st, but may be left off at other times."

"Switches on watch desk are provided for testing independent circuit. When requested to place the switch in a certain position, the instructions of the fire alarm operators must be complied with, and the switches must not be tampered with and left on point designated at all times."

"When a company's call is received on independent circuit, the member on watch must answer 2-3, and immediately remove receiver from hook of independent telephone and await message. The Morse key must not be used except for the purpose of transmitting proper signals."

"Any derangement of the equipment provided for the watch desk must be promptly reported by Commanding Officer to the Fire Alarm Telegraph Dept."

"Smoking on watch will be prohibited between the hours of 7 A. M. and 9 P. M."

"Reading on telephone watch absolutely prohibited."

Utica, N. Y.

"The house watch shall on receiving a telephone alarm immediately sound the dormitory bell."

"All members must keep absolutely quiet during the receipt of an alarm. The house watchman must maintain silence during the transmission of an alarm by telephone until the location has been repeated three times; after which questions may be asked calmly."

Scranton, Pa.

"The house watch shall see that the fire gong is wound up after every alarm."

"The house watch shall be responsible for all entries in the journal during his tour of watch duty, except those made by the officers personally."

"Neglect of the house watch to make entries in the journal as directed by the commanding officer or as required by general orders, or the failure to make proper entries of any absence from quarters on the part of either officers or men shall be punished."

Milwaukee, Wis.

"Exchanging of watch duty will not be permitted without permission of the commanding officer."

San Francisco, Cal.

"In all company houses of the Dept. all members of the company, except Capt. and Lieut. shall stand watches from 11 P. M. to 6 A. M. under the supervision of the Battalion Chief of the district. Capt. of chemical companies occupying quarters alone shall, however, stand a regular watch."

"In the event of a fire detail or any other unsual cause the Captain's and Lieutenant's watch may be extended by the Battalion Chief to meet such emergency."

"No changing or trading of watch duty in companies will be allowed without the consent of the captain."

"At 6 o'clock A. M. the house watchman shall call the company, and all members thereof must immediately arise and proceed with their regular duties."

"They shall also perform such other duties as may be required of them by their superior officers, or the rules and regulations of the Dept."

N. Y. Chiefs to Meet With Mayors

The twenty-third annual meeting of the New York State Fire Chiefs' Association will be held in conjunction with the New York State Conference of Mayors and Municipal Officials, in Binghamton, N. Y. The fire department sessions will be held June 18-19 in the Central Fire Station.

Chief Frank A. Jaynes, President N. Y. Chiefs' Association

The convention will be opened by President Frank A. Jaynes, chief of Rochester, N. Y. Chief R. A. Maxon of Gloversville, will discuss the topic of over-insurance. Chief Michael J. Fleming of Albany will speak on fire training schools while Chief John Kenlon of New York City will discuss association matters. A clambake will be held in the afternoon.

During the morning of the second day, H. G. Seagrave of New York City will speak on resuscitation. W. P. Capes, executive secretary, Mayors' Conference is scheduled to speak on new laws affecting fire fighting. F. R. Morgaridge, head of the Arson Department, National Board of Fire Underwriters, will talk on arson and incendiarism. The only paper for the afternoon session is on industrial fire departments by Chief James R. Eldridge of Johnson City. The convention will close with a dinner conference in the Hotel Arlington.

Airplane Cloth Plated with Nickel

A process is being developed by a Newark, N. J., inventor for nickel plating cloth used in airplane construction so as to make it fireproof. The object to be plated, if cloth or wood, is first given a metallic bath and then heated to a certain point and dipped in the nickel solution. It is believed that the process may also be applied to fireproofing other combustible materials.

Funds Being Raised in Ardmore, Pa.—Funds are being raised in Ardmore, Pa., for the purchase of an 85-foot aerial ladder. Firemen will make a house to house canvas for contributions.

Fire Department Salaries in 1929

Conclusion of Tables Showing Amounts Paid All Grades of the Fire Department in January of This Year

FOLLOWING is the conclusion of a series of tables giving valuable information as to the salaries which prevailed in fire departments in all parts of the United States and Canada as of January, 1929, for all grades from the Chief to first year privates, and including Deputy or Assistant Chiefs, District or Batalion Chiefs, Captains, Lieutenants, Master Mechanics, Engineers, Chauffeurs, Electricians, Fire Alarm Operators and the Secretary to the Chief. The cities are arranged according to population and the number of men in each Fire Department is given.

These tables have been compiled by and are published through the courtesy of the International Association of Fire Fighters, and have covered all sections of this country and Canada.

SALARIES THAT PREVAIL IN FIRE DEPARTMENTS IN THE UNITED STATES AND CANADA, JANUARY, 1929.

City.	Population.	No. of Men.	Chief.	Deputy or Asst. Chief.	District or Battalion Chief.	Captains.	Lieutenants.	Maximum pay.	3d year.	2d year.	1st year.	Master Mechanic.	Engineers.	Chauffeurs.	Electricians.	Fire Alarm Operator.	Secretary to Chief.
Leavenworth, Kans.	23,000	17	$1,800	$1,500	.....	$1,440	$1,380	$1,320	$1,320	$1,320	$1,140	$1,440	.....	.....	.....	.....	.....
Framingham, Mass.	23,000	40	2,400	2,200	.....	2,000	1,950	1,900	1,800	1,700	1,600	2,000	.....	.....	.....	.....	.....
Wausau, Wis.	23,000	37	2,100	1,620	.....	1,560	1,560	1,500	1,500	1,500	1,440	1,800	.....	.....	.....	.....	.....
Leominster, Mass.	23,000	61	2,200	.....	.....	2,007	2,007	1,825	1,825	1,825	1,825	.....	.....	.....	.....	.....	.....
Westmount, Que.	23,000	24	3,600	2,400	.....	2,200	1,980	1,700	1,500	1,400	1,300	1,850	.....	$1,700	.....	.....	$1,800
St. Cloud, Minn.	23,000	24	2,160	1,800	.....	1,700	None...	1,620	1,620	1,605	1,410	.....	.....	.....	.....	.....	.....
Marion, Ind.	23,000	50	2,100	1,800	.....	1,500	None...	1,440	1,440	1,440	1,260	.....	.....	.....	.....	.....	.....
Ft. William, Ont.	23,000	38	2,580	1,933	.....	.....	.....	1,533	1,533	1,489	1,445	.....	$1,715	.....	.....	.....	.....
Lackawana, N. Y.	23,000	44	2,400	.....	.....	2,040	1,920	1,860	1,860	1,860	1,860	1,920	.....	1,860	$1,860	$1,860	.....
St. Catherines, Ont.	23,000	29	2,700	1,710	.....	1,555	1,455	1,426	1,426	1,370	1,314	.....	.....	.....	.....	.....	.....
Kingston, Ont.	23,000	25	2,100	.....	.....	1,460	None...	1,205	1,150	1,095	1,040	.....	1,260	.....	.....	.....	.....
Ottumwa, Iowa	23,000	20	1,860	1,704	.....	1,620	1,620	1,572	1,572	1,572	1,572	.....	.....	.....	.....	.....	.....
Hot Springs, Ark.	23,000	32	2,400	1,800	.....	1,500	1,500	1,440	1,440	1,440	1,200	.....	.....	.....	.....	.....	.....
Beverly, Mass.	23,000	50	2,035	2,002	.....	.....	.....	1,825	1,825	1,825	1,825	.....	.....	.....	.....	.....	.....
Pittsburg, Kans.	22,000	16	2,400	1,980	.....	1,800	None...	1,560	1,560	1,560	1,560	.....	.....	.....	.....	.....	.....
Hibbing, Minn.	22,000	53	3,600	2,700	.....	2,106	2,070	1,950	1,950	1,950	1,875	2,280	1,950	.....	2,280	.....	2,070
Cheyenne, Who.	22,000	18	2,100	.....	.....	1,740	1,620	1,560	1,560	1,560	1,560	1,620	.....	.....	.....	.....	.....
Coffeyville, Kans.	22,000	15	1,980	1,680	.....	.....	.....	1,380	1,380	1,380	1,200	.....	.....	.....	.....	.....	.....
Freeport Ill.	22,000	31	2,400	1,800	.....	1,740	1,710	1,680	1,680	1,680	1,560	.....	.....	.....	1,680	1,680	.....
Peterborough, Ont.	22,000	21	2,500	1,600	.....	1,500	1,437	1,350	1,350	1,350	1,275	1,450	1,450	.....	.....	.....	.....
Moose Jaw, Sask.	22,000	40	2,680	.....	.....	1,716	1,596	1,536	1,536	1,536	1,416	1,956	.....	.....	.....	1,536	.....
Morgantown, W. Va.	22,000	14	2,400	.....	.....	.....	.....	1,800	1,600	1,380	1,380	.....	.....	.....	.....	.....	.....
Pocatello, Idaho.	21,000	18	3,600	.....	.....	1,920	None...	1,860	1,860	1,860	1,860	2,160	.....	.....	.....	.....	.....
Ironwood, Mich.	20,000	15	.....	.....	.....	1,920	1,860	1,740	1,740	1,740	1,680	.....	.....	1,800	.....	.....	.....
Hannibal Mo.	20,000	17	1,800	1,560	.....	.....	.....	1,512	1,512	1,512	1,512	.....	.....	.....	.....	.....	.....
Stratford, Conn.	20,000	7	2,800	2,500	.....	.....	.....	2,200	1,600	1,400	1,200	.....	.....	.....	.....	.....	.....
Gardener, Mass.	20,000	13	2,800	.....	.....	1,911	None...	1,820	1,820	1,820	1,820	.....	.....	.....	.....	.....	.....
Rome, Ga.	20,000	22	1,920	1,620	.....	1,380	None...	1,320	1,260	1,200	1,140	1,620	.....	.....	.....	.....	.....
Glen Falls, N. Y.	20,000	25	2,331	2,016	.....	1,890	1,827	1,701	1,701	1,701	1,701	1,890	1,764	.....	1,764	.....	.....
Vicksburg, Miss.	20,000	25	2,100	1,800	.....	1,560	None...	1,512	1,512	1,380	1,320	.....	.....	.....	.....	.....	.....
North Little Rock, Ark.	20,000	24	2,400	1,680	.....	1,620	None...	1,500	1,500	1,500	1,440	.....	.....	1,560	.....	.....	.....
Peabody, Mass.	20,000	34	2,500	2,300	.....	2,007	None...	1,825	1,825	1,825	1,825	.....	.....	.....	.....	.....	.....
Brunswick, Ga.	20,000	11	2,040	1,560	.....	.....	.....	1,260	1,260	1,260	1,260	1,500	.....	.....	.....	.....	.....
Hattiesburg, Miss.	20,000	16	2,000	.....	.....	1,620	None...	1,500	1,500	1,500	1,200	.....	.....	.....	.....	.....	.....
Cleburne, Texas	20,000	9	1,620	1,260	.....	.....	.....	1,200	1,200	1,200	1,140	.....	.....	.....	.....	.....	.....
Port Arthur, Ont.	19,000	33	2,820	2,010	.....	1,800	1,740	1,620	1,560	1,500	1,440	1,680	.....	.....	1,740	.....	.....
Walla Walla, Wash.	19,000	29	2,100	1,800	.....	1,680	1,560	1,560	1,560	1,380	1,260	.....	.....	.....	1,800	.....	.....
Auburn, Me.	19,000	15	2,000	1,664	.....	.....	1,560	1,560	1,560	1,560	1,482	1,560	.....	.....	.....	.....	.....
Guelph, Ont.	19,000	21	2,250	.....	.....	1,450	1,300	1,250	1,250	1,150	1,100	1,275	.....	.....	.....	.....	.....
Piqua, Ohio	18,000	17	2,400	1,860	.....	.....	.....	1,680	1,680	1,680	1,500	1,860	.....	.....	.....	.....	.....
Whittier, Calif.	18,000	11	3,300	.....	.....	2,160	2,040	1,860	1,860	1,860	1,620	1,860	.....	.....	.....	.....	.....
Tyler, Texas	18,000	14	1,920	1,380	.....	.....	.....	1,200	1,200	1,200	1,000	1,200	.....	.....	.....	.....	.....
Munroe, Mich.	18,000	14	1,960	1,900	.....	1,800	None...	1,640	1,640	1,640	1,640	.....	1,640	.....	.....	.....	.....
Niagara Falls, Ont.	18,000	7	1,200	.....	.....	.....	.....	1,590	1,590	1,590	1,590	.....	.....	1,590	.....	.....	.....
Stratford, Ont.	18,000	16	2,500	2,000	.....	1,600	None...	1,500	1,500	1,320	1,200	.....	.....	.....	.....	.....	.....
Brandon, Man.	18,000	16	2,400	.....	.....	1,800	1,680	1,500	1,440	1,380	1,290	.....	.....	.....	.....	.....	.....
Bedford, Ind.	18,000	15	1,700	.....	.....	1,620	None...	1,560	1,560	1,560	1,560	.....	.....	1,620	.....	.....	.....
Ogdensburgh, N. Y.	18,000	22	1,800	1,500	.....	.....	.....	1,200	1,200	1,200	1,200	.....	.....	1,320	.....	.....	.....
New Westminster, B. C.	18,000	30	2,000	2,040	.....	1,740	None...	1,620	1,620	1,620	1,620	1,740	.....	.....	.....	.....	.....
Billings, Mont.	18,000	15	$2,400	$1,920	.....	$1,860	None...	$1,800	$1,716	$1,572	$1,560	.....	.....	.....	.....	.....	.....
Kankakee, Ill.	18,000	17	1,800	1,680	.....	.....	.....	1,440	1,440	1,440	1,440	.....	.....	.....	.....	.....	.....
Winthrop, Mass.	18,000	10	.....	.....	.....	.....	$1,976	1,825	1,825	1,825	1,612	.....	.....	.....	.....	.....	.....
Laurel, Miss.	18,000	11	1,500	1,320	.....	.....	.....	1,200	1,200	1,200	1,200	.....	.....	.....	.....	.....	.....
Huntington, Ind.	17,000	24	1,500	1,440	.....	1,380	None...	1,240	1,240	1,240	1,240	$1,440	.....	$1,280	.....	.....	.....
St. Thomas, Ont.	17,000	17	2,500	1,800	.....	1,600	None...	1,500	1,500	1,330	1,275	.....	.....	.....	.....	.....	.....
Sapulpa, Okla.	17,000	18	2,400	2,040	.....	1,800	None...	1,620	1,620	1,620	1,620	.....	.....	.....	.....	.....	.....
Atchison, Kans.	17,000	21	2,000	1,620	.....	1,560	None...	1,440	1,440	1,440	1,380	1,800	.....	.....	.....	.....	.....
Batavia, N. Y.	17,000	20	1,800	1,600	.....	1,500	None...	1,500	1,500	1,500	1,500	.....	.....	.....	$1,500	$1,500	.....
Fremont, Ohio	16,000	12	1,800	.....	.....	1,680	1,680	1,620	1,620	1,560	1,500	.....	$1,620	.....	.....	.....	.....
Grand Island, Nebr.	16,000	11	1,800	.....	.....	.....	.....	1,500	1,500	1,500	1,500	.....	.....	.....	.....	.....	.....
North Bay, Ont.	16,000	13	2,400	1,680	.....	.....	1,620	1,500	1,500	1,360	1,260	.....	.....	.....	.....	.....	.....
Streator, Ill.	16,000	12	2,056	1,827	.....	1,665	None...	1,599	1,599	1,599	1,599	.....	.....	.....	.....	.....	.....
Hoquiam, Wash.	16,000	15	3,000	2,400	.....	1,980	None...	1,980	1,980	1,980	1,980	.....	.....	.....	.....	.....	.....
Chatham, Ont.	16,000	15	1,860	.....	.....	1,450	None...	1,360	1,360	1,360	1,300	.....	.....	.....	.....	.....	.....
Marquette, Mich.	15,000	7	600	.....	.....	.....	.....	1,620	1,620	1,620	1,620	.....	.....	1,620	.....	.....	.....
Iowa City, Ia.	15,000	7	1,920	1,740	.....	.....	.....	1,440	1,440	1,410	1,380	.....	.....	.....	.....	.....	.....
Trinidad, Colo.	15,000	13	2,400	1,980	.....	1,800	None...	1,800	1,800	1,800	1,800	.....	.....	.....	.....	.....	.....
Adrian, Mich.	15,000	17	1,800	.....	.....	.....	.....	1,440	1,440	1,320	1,200	.....	.....	.....	.....	.....	.....
Holland, Mich.	15,000	30	1,000	.....	.....	.....	.....	1,825	1,825	1,825	1,825	.....	.....	1,825	.....	.....	.....
Peru, Ind.	15,000	21	1,920	1, 560	.....	1,500	None...	1,440	1,440	1,440	1,440	.....	1,440	.....	1,500	.....	.....
Independence, Mo.	15,000	14	2,000	1,620	.....	1,500	None...	1,500	1,500	1,500	1,200	.....	.....	.....	.....	.....	.....
Independence, Kans.	15,000	13	1,800	1,560	.....	.....	.....	1,380	1,380	1,380	1,380	1,380	.....	.....	.....	.....	.....
Mt. Clemons, Mich.	15,000	10	2,300	2,040	.....	.....	.....	1,800	1,800	1,800	1,800	.....	.....	.....	.....	.....	.....
Aberdeen, S. D.	15,000	16	1,800	1,620	.....	1,560	1,560	1,560	1,560	1,560	1,440	.....	.....	.....	.....	.....	.....
Olympia, Wash.	15,000	10	2,100	1,800	.....	1,680	None...	1,560	1,560	1,560	1,560	.....	.....	.....	.....	.....	.....
Niles, Mich.	14,000	10	2,000	1,860	.....	.....	.....	1,800	1,700	1,600	1,500	.....	.....	.....	.....	.....	.....
Marinette, Wis.	14,000	17	2,040	.....	.....	1,560	None...	1,440	1,440	1,440	1,440	.....	.....	.....	.....	.....	.....
Galt, Ont.	14,000	13	1,750	1,500	.....	.....	.....	1,200	1,200	1,200	1,200	.....	.....	.....	.....	.....	.....
Canton, Ill.	13,000	8	1,560	1,440	.....	.....	.....	1,440	1,440	1,440	1,440	1,440	.....	.....	.....	.....	.....
Missoula, Mont.	13,000	13	2,160	1,920	.....	1,830	None...	1,800	1,800	1,740	1,680	1,830	.....	.....	.....	.....	.....
Boulder, Colo.	13,000	12	2,100	.....	.....	1,680	None...	1,590	1,590	1,590	1,470	.....	.....	.....	.....	.....	.....
Little Falls, N. Y.	13,000	30	2,100	.....	.....	.....	.....	1,584	1,584	1,584	1,584	.....	.....	.....	.....	.....	.....
Belleville, Ont.	13,000	15	1,500	.....	.....	.....	.....	1,200	1,200	1,080	960	.....	.....	.....	.....	.....	.....
Murphysboro, Ill.	13,000	4	1,920	.....	.....	.....	.....	1,620	1,620	1,620	1,620	.....	.....	.....	.....	.....	.....
Lethbridge, Alb.	12,000	18	2,172	.....	.....	1,834	None...	1,620	1,560	1,440	1,320	1,740	.....	.....	.....	.....	.....
Centralia, Wash.	12,000	7	2,100	.....	.....	1,680	1,560	1,440	1,440	1,440	1,440	.....	1,500	.....	.....	.....	.....
East Moline, Ill.	12,000	7	1,845	1,560	.....	1,500	None...	1,440	1,440	1,440	1,440	.....	.....	.....	.....	.....	.....
El Dorado, Kans.	12,000	9	2,100	.....	.....	.....	1,500	1,500	1,500	1,500	1,320	.....	.....	1,500	.....	.....	.....
Logan City, Utah.	12,000	12	1,860	.....	.....	1,508	None...	1,440	1,440	1,440	1,440	.....	.....	.....	.....	.....	.....
Ft. Madison, Ia.	12,000	12	1,620	.....	.....	.....	.....	1,320	1,260	1,200	1,080	.....	.....	.....	.....	.....	.....
Coshocton, Ohio	12,000	8	1,680	.....	.....	1,560	None...	1,500	1,500	1,500	1,500	.....	.....	.....	.....	.....	.....
Ames, Ia.	10,000	6	2,160	1,800	.....	.....	.....	1,800	1,620	1,560	1,500	.....	.....	.....	.....	.....	.....
Brazil, Ind.	10,000	9	1,380	1,320	.....	.....	.....	1,200	1,200	1,200	1,200	.....	.....	.....	.....	.....	.....
Red Wing, Minn.	10,000	4	2,000	1,650	.....	.....	.....	1,440	1,440	1,440	1,440	1,620	.....	.....	.....	.....	.....
Chisholm, Minn.	10,000	19	2,640	2,160	.....	.....	1,980	1,800	1,800	1,800	1,800	1,980	.....	.....	.....	.....	.....
Woodstock, Ont.	10,000	10	1,800	1,550	.....	.....	.....	1,368	1,368	1,272	1,186	1,416	.....	1,368	.....	.....	.....
Medicine Hat, Alb.	10,000	10	2,100	1,680	.....	1,560	1,500	1,380	1,380	1,320	1,200	1,710	.....	.....	.....	.....	.....
Baker, Oreg.	10,000	5	1,800	1,620	.....	.....	.....	1,500	1,500	1,500	1,500	.....	.....	.....	.....	.....	.....
Valparaiso, Ind.	9,000	14	$300	.....	.....	.....	.....	$1,620	$1,620	$1,620	$1,620	.....	.....	.....	.....	.....	.....
Prince Albert, Sask.	8,000	6	2,100	.....	.....	.....	.....	1,380	1,320	1,260	1,200	$1,560	.....	.....	.....	.....	.....
Nelson, B. C.	7,200	6	2,700	$1,800	.....	.....	.....	1,626	1,560	1,500	1,440	.....	.....	.....	.....	.....	.....
Prince Rupert, B. C.	7,000	7	2,244	.....	.....	.....	.....	1,680	1,680	1,680	1,680	2,040	.....	$1,800	.....	.....	.....
Franklin, N. H.	7,000	6	150	.....	.....	.....	.....	1,560	1,560	1,560	1,560	.....	.....	.....	.....	.....	.....
Tonopah, Nev.	4,500	5	2,100	1,980	.....	.....	.....	1,980	1,980	1,980	1,980	.....	.....	1,980	.....	.....	.....
Fernie, B. C.	4,500	9	1,800	.....	.....	.....	.....	1,200	1,200	1,200	1,200	.....	.....	.....	.....	.....	.....
Cobalt, Ont.	4,200	2	1,680	.....	.....	.....	.....	1,380	1,380	1,380	1,380	.....	.....	1,380	.....	.....	.....

NEW YORK BOARD OF MERIT NAMES 1929 MEDAL WINNERS

More Than 250 Acts of Heroism Considered in Making Awards—Medals to be Presented by Mayor James J. Walker on June 17

FIRE COMMISSIONER JOHN J. DORMAN announced the names of ten members of the department who have been selected by the Board of Merit for medals for exceptional valor in the line of duty during 1928. The Board of Merit considered over 250 acts of personal heroism performed last year.

In addition to the selection of ten outstanding acts of bravery, the Board of Merit also made an award for exceptional discipline and another award for efficiency in the Fire College.

The medals will be pinned on the fire heroes in front of the City Hall by Mayor James J. Walker at one o'clock Monday, June 17, 1929.

In addition to the following private medals donated annually for personal valor, the recipients will each receive an official medal of the Fire Department which carries with it an additional three per cent in seniority rating.

The Bennett Medal is awarded to Fireman George W. Reilly of Hook & Ladder Company 19 in the Bronx, for his hazardous rescue of Miss Bessie Keaney from the fourth floor of 427 East 158th Street, Bronx, on the afternoon of January 19th. Reilly, off duty, was at home on the floor above when he heard the cry of "fire." Skipping down one flight he found a policeman at Miss Keaney's door. Flames, smoke, and heat drove both of them back at first, but Reilly remembering his training, crept in the long and narrow hallway on his stomach.

He found the woman in the living room which was ablaze and swiftly carried her out. She was totally unconscious and the fireman was black in the face and on the verge of collapse. Reilly resides at No. 897 Bryant Avenue, The Bronx.

The Bonner Medal is awarded to Fireman Francis Parks and the Trevor-Warren Medal to Fireman Roderick Johnston, both of Hook & Ladder Company 21, for their joint rescue of Mrs. Margaret Savage, seventy-two years, and her two sons from the fifth floor window of No. 420 West 42nd Street, shortly after midnight on January 23rd. Parks found Mrs. Savage unconscious near the window of her home to which her sons had assisted her. He lifted her to the sill and was soon joined by Johnston who had "leeched" across the facade of the building from the adjoining apartment. The two firemen held Mrs. Savage at the window awaiting an aerial ladder to reach them, but in the interim, flames shot out of the fourth floor and licked their way toward the window above, forcing the firemen and their burdens to cover. When the aerial reached them, the firemen lifted the aged woman out onto the ladder and with the aid of other firemen, the trio were rescued. Parks and Johnston were both so badly burned, they had to be relieved from duty.

The Van Heukelom Medal is awarded to Fireman Frank J. Hines of Hook & Ladder Company 30, for his rescue of Mrs. Julia Heintz early in the morning of April 16th at Madison Avenue and 124th St. The rescue was one of the most novel in the annals of fire fighting in this city. Mrs. Heintz resided with her husband on the sixth floor of one of the early apartment houses in the Mt. Morris Park section of old Harlem.

Fire of fourth alarm proportions was raging in the building and the Heintzes were trapped at a window which overlooked the rear yards of smaller brownstone houses on Madison Avenue. The roofs of the houses were too far out of line with their apartment window to justify making a leap. It meant the yard below and possible escape from death or incineration within the next few minutes where they stood. Their predicament was learned by Capt. Harold Burke of Hook & Ladder Company 30 who had just arrived on the second alarm. With his men he raced to the roof of the adjoining house on Madison Avenue to which he hoisted a 30-foot ladder and a rope. The roof extended back to within fifteen feet of the Heintz's window and was one story short. Capt. Burke ordered a derrick made of the ladder by cutting out footings in the tin covered roof. The rope was attached to a rung near the top of the ladder and as the firemen paid out the rope, the ladder swung obliquely toward the window. The firemen counselled Heintz and his wife to wait until it reached them. Mrs. Heintz, however, leaped and caught hold of the under-side of the ladder. When the ladder was rested against the spot she had impulsively jumped from, Fireman Hines started out on the top-side of the shaky bridge-like structure and climbed along to where she was hanging on, with over sixty feet distance between the ladder and the yard below. Hines reached under and seized her at the arm pits. He held her below the beam of the ladder as he worked his way back to the roof where other firemen lifted her over the cornice. The woman's husband climbed down the ladder himself.

The Crimmins Memorial Medal is awarded to Capt. Harold J. Burke of Hook & Ladder Company 30 for his rescue of Mrs. Marie Tyson, colored, from the rear window of the fifth floor of her home at 253 West 137th Street, at midnight, April 22nd. Capt. Burke, at that time a lieutenant in the same company, upon arriving at the fire, ascended with his company to the top floor of the building. Although driven

(*Continued on page* 421)

Utica School Trains Instructors

Twenty-nine department members were enrolled at the first Utica zone school for fire department instructors held at Utica, N. Y., April 22-27. Each of the sessions had a one hundred per cent attendance. Each of the following cities sent one or more men who when they return to their respective communities, will train firemen of the local departments: Kingston, 3; Poughkeepsie, 1; Syracuse, 2; Albany, 2; Binghamton, 2; Elmira, 2; Glen Cove, 2; Watertown, 3;

Approved Knot Tying at Rear of No. 1 Station

Deputy Chief McGauley of the Utica Fire Department demonstrating before the visitors, the proper method of making fire department knots.

Rochester, 1; Troy, 2; Yonkers, 2; Ogdensburg, 2, and Utica, 5.

Papers were delivered in the morning, and demonstration and work at the drill tower occupied the time alloted for the afternoon. Lectures were prepared by Chief Joseph N. Sullivan, Utica Fire Department; J. H. Howland, engineer, National Board of Fire Underwriters; Captain Edward Sillers, Yonkers; Captain Louis Mosher, Elmira and Captain William Kinary of Albany. They covered the topics of "Courtesy of Men to Officers and the Public," "Fire Prevention," "Ventilation," "First Aid and Resuscitation," "Salvage Work," "Care of Equipment," "Special Hazards," "Care and Driving of Motor Apparatus," "Sprinkler Systems," and "Hydraulics of Fire Streams."

Practical demonstrations included operation of sprinkler heads, cellar pipes, pumpers with various hose layouts, pumper tests at Barge Canal with demonstration of the Utica water tower. Through the courtesy of the American-LaFrance & Foamite Company, there was a display of both foam and carbon dioxide methods of extinguishing fires.

The Order of Blue Gooses, comprising all of the instructors present and with membership limited to New York State fire department drill instructors, was inaugurated with a charter membership of thirty-five men. Officers have not been elected, but the chairmen of committees are as follows: Ritual, Deputy Chief George E. Woods, Watertown; Official Cartoonist, Lieut. Arthur W. Espey, Elmira; Social Activities, Battalion Chief Alex. Sutherland, Rochester; Membership, Deputy Chief James Donavan, Utica. Assistant Chief Arthur E. Chambers of Yonkers and Chief Murphy of Kingston were appointed guardians of wild gooses.

Chief Sullivan of Utica was complimented on the courteous and considerate attention given the visitors during the week.

WITH THE EDITOR

A Queer Reward of Merit

There is a peculiar comment on the justice of municipal governments in appreciating the services of their employees contained in the case of Chief Albert Herring, of Murphysboro, Ill. The genial "Al" is well known to Fire Officials throughout the country, as the former chairman of the Exhibit Committee of the International Association of Fire Chiefs. He is a progressive officer and naturally hopes for the highest efficiency in the forces under him. With the temperament of an individual such as the head of the Murphysboro Fire Department, such hopes mean hard work for their realization.

Not only has the chief worked hard for the increase of efficiency of his own department; he has also devised a system of mutual help among the departments in the vicinity of his city, which is a model on which all other such systems can be built.

Naturally, one would think that the city authorities of Murphysboro would be proud of their progressive chief. Maybe they are. But, if so, they have a unique way of expressing such appreciation, for they have reduced his fire-fighting force by one man, and have cut the none-too-munificent salary of the chief twenty-five dollars per month.

If the city authorities were to search far, they could not have found a more efficient method of dampening the enthusiasm of their fire chief than this. They are fortunate in having a man at the head of their fire department who will not be influenced by such action on their part, but this does not alter the fact that such an act would normally react upon the efficiency of the fire department.

There seems to be no excuse for such action on the ground of economy. The small amount saved in salaries, would quickly be wiped out by a good sized general alarm fire, with its consequent heavy property damage and possible loss of life.

Making Cities Liable for Apparatus Accidents

Considerable of an injustice has been heretofore the result of the provisions of the law as regards the personal liability of the drivers of fire apparatus for injuries resulting from collisions and other accidents in which the engines were involved. The courts have held in most instances that the drivers were personally responsible for injury sustained by persons or for damage to property resulting from such accidents. One case of this kind in which the injustice was especially apparent was that of a fireman who was ordered to take out an apparatus which had been declared deficient and in need of repairs. The result was that a child was killed. The courts held the driver alone responsible, and he was compelled to retire and go into bankruptcy in order to escape the infliction of damages secured by the parent of the child. This is only one of many incidents of a like nature, in which the fireman has been the sufferer.

But an act recently signed by Governor Roosevelt, of New York State, definitely places the responsibility for such accidents, as far as resulting damage is concerned, upon the city or town. This law provides that the municipality is responsible for any damages resulting from the operation of motor vehicles by any of its employees. Last year the New York State Legislature passed a bill identical with the new law, but the then Governor Smith vetoed it.

The present law has been endorsed by practically all of the prominent chiefs' and firemen's organizations. It embodies a just principle, in that it avoids the mulcting for damages of firemen who daily take their lives in their hands in answering alarms and traveling the crowded city streets at high speed. Such accidents are practically always traceable to contributory negligence on the part of the motorist and often are the direct result of carelessness and lack of caution by the driver of the private car or commercial vehicle, through the disregard of signals, warning sirens or lights.

Usually the motorist has only himself to blame for accidents arising to the vehicle he is driving, through collisions with motor apparatus. A careful motorist rarely gets into trouble in this respect.

Such being the case, it is doubly unjust to make the fireman liable to the attacks of some adroit attorney, who can present his case so attractively that the jury renders a verdict in favor of the "unfortunate" private individual, who really should shoulder the entire blame.

What Is Old Fire Apparatus Worth?

Fire departments in purchasing new fire apparatus often are prone to demand from the manufacturer an allowance for the old apparatus that they may wish to turn in many times in excess of its real value. This demand is sometimes based on the assured serviceability of the old fire engines, in spite of their having been in use for many years, and their parts in a considerably worn condition.

A recent sale by the New York Fire Department throws some significant light on how old fire apparatus is regarded by possible purchasers, and the values that sellers may expect for such engines when they attempt to dispose of them in the open market.

The sale included some fifty-six pieces of condemned apparatus and embraced thirty-four hose wagons; six motorized steam fire engines; five tractors and ten automobiles. The highest price the city was able to obtain for these machines was forty dollars each and some were sold for considerably less.

Perhaps the most significant fact about the sale was that the purchasers were, in practically every case, experienced junk dealers, who probably knew the real worth of their purchases. The fire-fighting value of the apparatus may not have appealed to them—about the only thing that interested them was the old metal and parts contained in the antiquated machines.

This incident shows quite clearly that the old apparatus has little real value and that it is hardly fair to expect apparatus builders to make any sort of a liberal allowance on the old engines turned in by fire departments when buying new apparatus.

Chief Coyle of Omaha, Dead

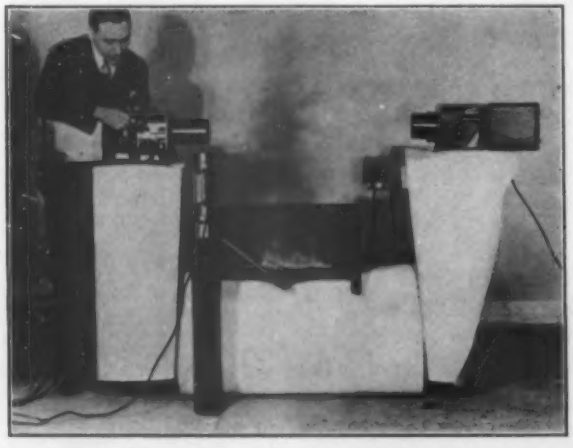
John T. Coyle, head of the fire department in Omaha, Neb., died at the St. Catherine Hospital following an operation to remove a cancer and tumor from a kidney. He died while preparations were being made to give him a blood transfusion in an effort to save his life. Doctors believe that the cancer that troubled the chief developed from injuries received while fighting fires.

He was injured in 1898 in a fire, and in 1903 was seriously injured sliding down a fire pole. He was overcome by gas in a store fire in 1909 and received other injuries during his long service in the department.

Chief Coyle was fifty-nine years old. He was appointed to the fire force January 31, 1895 and was promoted to lieutenant March 1, 1898; captain December 1, 1899; captain second class, December 1, 1904; first class, December 1, 1909; second assistant chief, June 1, 1915 and head of the department, August 2, 1927.

Chief Coyle is survived by his widow and two sisters residing in Omaha.

York, Pa., Firemen to Visit Paris—Twenty-six members of Union Fire Company of York, Pa., will visit Paris, France.



Now We Have the Robot Firemen Operated by Electricity

An electrical mechanism was displayed at the annual dinner of the American Institute of the City of New York that operated a fire extinguisher as soon as a smoke cloud and flames become visible. This operation was based on the reaction of the photo-electric cell to light. A match was tossed into a glass tank filled with gasoline. As soon as smoke appeared, carbon dioxide was released from a carbon dioxide extinguisher. This electrical unit could also be used to count the number of guests attending a meeting, and could perform countless other tasks. It was developed by the Westinghouse Electric and Manufacturing Company. John V. Breisky of this company is here shown demonstrating the use of the photo-electric cell in operating a fire extinguisher.

MANY CHIEFS PLAN TO ATTEND NEW ENGLAND CONVENTION

George F. Cobb Reports Many Reservations Received — Exhibits to be Displayed in Armory Short Distance From Hotel Taft

By HARRY BELKNAP

RESERVATIONS for hotel accommodations and exhibit space at the Seventh Annual Convention of the New England Association of Fire Chiefs are coming in very rapidly according to reports by George F. Cobb, 774 Albany Street, Boston, Mass., traffic manager, who is in charge of hotel arrangements; and Chief John S. Pachl, of the Annex Fire Department, New Haven, Conn., chairman of the Exhibit Committee.

Chief John S. Pachl

The convention headquarters will be in the Hotel Taft where a flat rate has been established for convention guests of $4.50 per day including breakfast.

The exhibit of apparatus and accessories will be in the Second Regiment Armory on Meadow Street. This is only a short walk from the hotel and Chief Lawrence E. Reif, of New Haven, has arranged to have the route well placarded with signs and directing arrows.

The dates of the convention are June 25, 26, and 27 and as usual at the New England conventions, the registration will begin the night before the first regular business session.

P. Hildreth Parker, George W. Austin, and Herbert K. Pratt, all of the Box 52 Association, of Boston, will be the registrars as in previous years.

Hotel Taft

An interesting and varied program has been arranged. There will be an exhibition drill by the Department of Fire Service, New Haven, and a shore dinner at Savin Rock. The ladies will be taken on a tour of Yale University and given a theatre party, also motor trips to points of historic interest.

Pacific Coast Chiefs to Meet in July

The Pacific Coast Association of Fire Chiefs will meet in Vancouver, B. C., July 23-26, with headquarters at the Vancouver Hotel. Music during the convention will be furnished by the Pasadena Fire Department Band, and the Seattle Fire Department Orchestra and Quartette.

Papers will be presented on rural fire protection, approved vs. non-approved appliances, manufacture and use of nitrocellulose lacquers, use of dynamite during conflagrations, carbon-dioxide gas, fire fighting in extreme cold weather, use of water at fires, booster pumps, and the fire alarm system.

The ladies' committee have planned theatre partis, shopping trips through the historic Hudson Bay Store, and other means of diversion. The local committee suggests that reservations be made immediately as Vancouver is always filled with tourists during July and August.

Questions and Answers

NOTE—Readers are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified.

Capacity of Main System

To the Editor:

I would appreciate very much your answering the following questions:

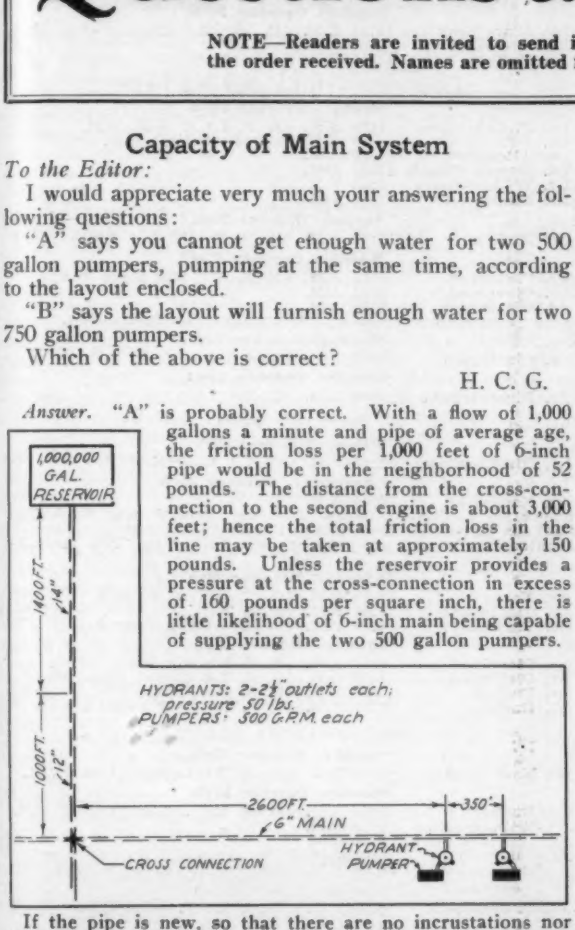
"A" says you cannot get enough water for two 500 gallon pumpers, pumping at the same time, according to the layout enclosed.

"B" says the layout will furnish enough water for two 750 gallon pumpers.

Which of the above is correct?

H. C. G.

Answer. "A" is probably correct. With a flow of 1,000 gallons a minute and pipe of average age, the friction loss per 1,000 feet of 6-inch pipe would be in the neighborhood of 52 pounds. The distance from the cross-connection to the second engine is about 3,000 feet; hence the total friction loss in the line may be taken at approximately 150 pounds. Unless the reservoir provides a pressure at the cross-connection in excess of 160 pounds per square inch, there is little likelihood of 6-inch main being capable of supplying the two 500 gallon pumpers.



If the pipe is new, so that there are no incrustations nor tuberculations, and if there is no sediment in the main, it is likely that a pressure of 160 pounds at the cross-connection would be satisfactory for supplying the two 500 gallon pumpers.

It would be entirely out of the question to expect this layout to supply two 750 gallon pumpers.

Stream Range Formulas

To the Editor:

I have read the first article in Fire Engineering of April 3 on "The Place of Pumpers in Fire Fighting," by Clarence Goldsmith, and I find this paper very instructive.

Mr. Goldsmith, in this article, gives a formula for the vertical reach of streams, as follows:

"$H = \sqrt{240\ p - p^2} - 1{,}900 - 15$ where H = height in feet and p = pressure in pounds at the base of the playpipe (for 50 lbs. or less subtract 1 from 15 for each ⅛ increase in nozzle diameter above ¾ inch, for pressures above 50 lbs. subtract 2 from 15, for ⅛ increase in diameter above ¾ inch). This formula is only applicable to fire streams having nozzle pressures up to 120 lbs."

I quite understand the latter part of the formula, but I do not understand what 240 means. Is this the engine pressure?

Also, in the case of pressure minus pressure squared, minus 1,900, minus 15, this all must be square rooted, but where does he arrive at these figures? What do they represent? Are these figures staple factors, such as the underwriters give out, or can they be arrived at by way of the engine pressure, the nozzle pressures, or by some other means?

On reading down further in the article I met some more "Greek," under the caption "Actual Operation of Fire Engine Company." This reads in part: "Assuming that the pumper is equipped with a large chemical tank *of* a water tank." What is meant here? Is this a typographical error? I never heard of a chemical tank of a water tank. Is this something new, or should this read "or?"

Later on he states that 2½" hose is stretched up to the building, after being connected to a 2 ½" hydrant outlet, and then, further, that if the fire can be handled with a chemical line, the chemical line should be stretched into the building. If the fire can be controlled with this line, then the 2½" line should be picked up and loaded. If chemical line is not sufficient, use 2½" hose also, which will allow water with sufficient pressure to be delivered through the nozzle of the chemical line. Then he takes more 2½" hose from the wagon, putting on 1⅛" shut-off nozzle, has water started and line advanced to the seat of the fire.

Does he attach chemical line to 2½" hose? Why does he take 2½" hose from the wagon, then load it on wagon again, if a chemical line will suffice? Why does he again take 2½" hose from wagon, and put on a 1⅛" shut-off nozzle? Why the two operations? If the hose is off the first time, why put it back again? This will be extra time lost, if a good stream is wanted in a hurry.

Under the heading "Chief Should Know Water Distribution System," in the second paragraph, the article says, "If compound gauge shows 41 lbs. through 600 feet of 1½" hose, with a 1¼" tip, it will be necessary to carry 241 lbs. pressure at the discharge gate," and further it states, "Stretch a second 2½" hose, 600 feet long and siamesed into the nozzle," etc. I believe this first 1½" hose should mean 2 ½" hose, don't you? It would not seem right to siamese a 1½" hose line with a 2½" hose line; it does not appear to be a logical stretch.

I cite these instances with the idea in mind that your magazine having such a large circulation, it may lead your readers to labor under a great misapprehension like myself. That is why I would like to be straightened out on the above subjects.

Very truly yours.
J. E. F.

Answer. Referring to the first paragraph of your letter, the "240" is a constant. You probably appreciate that in building a formula to fit experimental results certain constants of this type must necessarily be incorporated. The presence of such a figure has no meaning whatsoever from the standpoint of theory of the subjects, but is inserted merely to give results which tally with experimental figures. The figures 240, 1,900 and 15 are constant just as is the figure 30 in the formula for discharge (Discharge = 30 x d x d x square root of p).

With reference to paragraph four of your letter, the above

formula is based upon the Underwriters' figures, that is, upon the figure secured through test by John R. Freeman, and upon which the Underwriters' formulas are founded.

Regarding the question asked in paragraph five, this is a typographical error. "Of" should be "or."

Referring to paragraph five, the different statements given by the author should be considered separately instead of being considered as all a part of one operation. In practically all large departments, and the great number of smaller ones, a chemical line is always stretched into a fire first, if the fire has made little headway; but immediately following the chemical line a 2½-inch water line is stretched in and charged as a second line of defense. In the event that the chemical line does not bring the fire under control, but the fire is creeping ahead, the 2½-inch water line is ready to take up the work and finish the job.

On the other hand, if the chemical line, after being in operation, brings the fire under control and the water line is no longer needed, this latter line may be picked up and loaded.

But, if the chemical line is not sufficient as stated in the paragraph referred to, the 2½-inch hose is used also.

Here is another condition which the writer refers to: Suppose the chemical line is handling the fire satisfactorily, but the charge in the chemical tank is not sufficient to complete the job. A water line may be attached directly to the chemical tank to continue the supply of water through the tank and the chemical hose and thus make it possible for the chemical line to complete its job without the necessity of having to use a separate water line.

Incidentally, the various operations suggested in the part of the article referred to are all proven operations, but you must consider them as separate operations rather than all referring to procedure in handling a specific fire.

With regard to paragraph eight, 1½-inch hose is a typographical error. This should be a 2½-inch hose.

Our readers will, no doubt, appreciate as much as does the Editor the trouble you have taken in calling the matter to our attention.

Spontaneous Ignition of Animal Oils

To the Editor:

Will you kindly answer the following question for me and oblige.

J. A. J.

Question. Are animal oils in any form susceptible to spontaneous ignition? Are animal oils volatile?

Answer. Practically all animal oils used in commerce are susceptible to spontaneous ignition. Among these might be mentioned tallow, oleo oil, lard oil, bone oil, neatsfoot oil, red oil and fish oils.

None of them is particularly volatile. The normal flash point of these oils centers around 500 degrees Fahr.

Itinerary of "Eastern Regulars"

The "Eastern Regulars" will make their 16th Annual Trip to the Convention of the International Association of Fire Chiefs which will be held in Birmingham, Ala., October 22 to 25, inclusive.

Fred Bensen

The following itinerary has been selected, and in addition, through sleepers will leave Philadelphia, Boston and Albany. The party will gather at Buffalo for the balance of the trip.

Monday, October 21, will be spent in Cincinnati, where the party will be entertained the whole day. On the return trip, it will stop at Nashville, Tenn., "the Athens of the South," where a very interesting program has been arranged.

The cost of this trip for a lower berth, from New York, including all expenses with the exception of hotels and meals in Birmingham, will be $93.59. Hotel reservations will be made as the past, so all that will be necessary for those joining the party to do is to write to Frederic E. Bensen, 2303 Chanin Building, 42nd Street and Lexington Avenue, New York City, stating the type of reservation desired.

The itinerary will be out in a few days.

GOING TRIP—NEW YORK PARTY

Sunday, October 20th

Lv. New York 12:25 P.M. (E. S. T.) Lackawanna R.R.
Lv. Hoboken 1:00 P.M.
Ar. Buffalo 11:00 P.M.

GOING TRIP—PHILADELPHIA PARTY

Sunday, October 20th

Lv. Philadelphia 9:20 A.M. (E. S. T.) P. & R. R.R.
Lv. Bethlehem 11:18 A.M. Lehigh Valley R.R.
Lv. Allentown 11:29 A.M.
Lv. Mauch Chunk 12:14 P.M.
Lv. Wilkes-Barre 1:55 P.M.
Ar. Buffalo 7:58 P.M.

Sunday October 20th

Lv. Buffalo 11:05 P.M. (E. S. T.) Nickel Plate Road

Monday, October 21st

Ar. Cleveland 3:05 A.M. (E. S. T.) Big Four R.R.
Lv. Cleveland 3:45 A.M.
Ar. Cincinnati 9:15 A.M.
Stopping over in Cincinnati for the entire day.

Monday, October 21st

Lv. Cincinnati 11:00 P.M. (E. S. T.) L. & N. R.R.

Tuesday, October 22nd

Ar. Birmingham 10:45 A.M. (C. T.)

RETURN TRIP

Friday, October 25th

Lv. Birmingham 11:45 P.M. (C. T.) L. & N. R.R.

Saturday, October 26th

Ar. Nashville 6:00 A.M.
Breakfast at Hotel Andrew Jackson. Stopping at Nashville, "Athens of the South," where the morning will be spent in sightseeing in and around the city, including "The Hermitage."

Saturday, October 26th

Lv. Nashville 12:19 P.M. (C. T.) L. & N. R.R.
Ar. Cincinnati 9:30 P.M. (E. S. T.)
Lv. Cincinnati 10:00 P.M. (E. S. T.) Big Four R.R.

Sunday, October 27th

Ar. Cleveland 4:00 A.M. (E. S. T.) Big Four R.R.
Lv. Cleveland 4:50 A.M. (E. S. T.) Nickel Plate Road
Ar. Buffalo 8:55 A.M. (E. S. T.) Nickel Plate Road
Lv. Buffalo 9:30 A.M. (E. S. T.) Lackawanna R.R.

PHILADELPHIA PARTY

Sunday, October 27th

Ar. New York 7:30 P.M. (E. S. T.) Lackawanna R. R.

Sunday, October 27th

Lv. Buffalo 9:30 A.M. (E. S. T.) Lehigh Valley R.R.
Ar. Wilkes-Barre 3:39 P.M.
Ar. Mauch Chunk 5:31 P.M.
Ar. Allentown 6:14 P.M.
Ar. Bethlehem 6:22 P.M.

Sunday, October 27th

Ar. Philadelphia 8:08 P.M. (E. S. T.) P. & R. R.R.

Elmira Zone School Successful

The Elmira Zone School sponsored by the New York State Mayors Conference and the fire chiefs, was opened on May 6. Sessions were held Monday, Wednesday and Friday with a total attendance of sixty-one. Lecture periods opened at ten a.m., with two instructors giving one lecture each. Captain Louis Mosher gave a talk on "Courtesy of Firemen to Officers and the Public," and Lieutenant Arthur Espey spoke on "First Aid and Rescue Work." He also gave demonstrations of the Shaeffer method of artificial respiration and the use of the HH Inhalator.

Those attending were taught approved methods for tying knots in making hose lines fast to a chimney, and other fire department knots.

The Elmira drill tower was equipped with a standpipe for future evolutions. The department gymnasium was furnished with benches and used as a lecture room.

As a matter of courtesy, several northern Pennsylvania fire departments were invited to attend. Delegations were present from Sayre, Mansfield, Troy, Canton and Elkland, Pa. New York state representation included Corning, Waverly, Ovid, Lodi, Interlaken, Watkins Glen, Odessa, Montour Falls and Elmira Heights.

Iowa Firemen to Meet in June—The seventh annual convention of the Iowa Association of Fire Fighters will be held in Waterloo, June 5 and 6. The Hotel President will be convention headquarters.

NEW JERSEY ASYLUM BURNS WITHOUT LOSS OF LIFE

Fire Department Does Good Work Under Difficulties — Blaze Starts Beneath Cupola and Spreads Along Roof—Insane Patients Routed

NOT one of the 1,400 patients at the New Jersey State Hospital at Greystone Park was lost in a fire that broke out at midnight and destroyed the two top floors of the right wing. The building, consisting of administration quarters and dormitory space was fifty-two years old. The institution for the insane was really a city in itself. Besides the building involved there are laboratories, shops, quarters for the employees, power house and a railroad siding with freight house. Nearly one thousand employees and 3,700 patients are quartered at Greystone Park.

Fire started from an undetermined cause, in a cupola on the right wing of the huge, five-story stone building and burned through several hundred feet on both sides of this point. It affected sixty wards.

The alarm was given by the hospital's fire alarm system, and the three pieces of apparatus on the grounds were sent out immediately. The asylum has its own fire department consisting of a full time chief and a trained force of firemen. Calls for assistance were sent to Morristown, Morris Plains and Morris Township, and all responded quickly.

It was impossible to fight the fire at close range. There was nothing substantial upon which the ladders could rest, and all openings and windows leading out to the roof were heavily barred as a protection for the patients. The fire had to be fought from the ground until reinforcements and more apparatus arrived.

Several large streams were put in operation, but by this time the fire had gained considerable headway in the attic. The fire traveled along concealed passages beneath the roof and soon the entire top story of the right center wing was gutted, and the fire was burning along the inside roof peak of a four-story annex. Many times when the fire was believed to be under control, it would suddenly break out in a new place.

Falling slate from the roof made the work of the firemen extremely difficult. One fire-fighter received a bad scalp wound when he was struck by a slate. The barrage of heavy streams broke through the slate roof and the top floors were flooded. This prevented the fire from reaching the lower floors. A number of streams were operated within the building.

Good work was done by the fire fighters. The buildings

Wing of New Jersey State Hospital Destroyed by Fire

involved were only wings of a much larger central building to which many other additions, similar to the one destroyed, were joined—practically all of non-fireproof construction.

The water supply was good. It was pumped from a reservoir on the grounds.

There were two Ahrens-Fox pumpers in use—one sent by Morristown, a Waterous pumper of Morris Plains, a Mack pumper of Morris Township, a city service ladder truck belonging to the township department and a city service truck of Morristown. This unit was later recalled to quarters and an Ahrens-Fox aerial ladder sent to the fire. Morristown also sent its new searchlight truck. Several smaller pieces of apparatus were in service.

Patients from the burning wards were rushed into a large recreation hall, and the attendants started group singing. Strangely, they preferred to sing, "Keep the Home Fires Burning." State police established a fire line about the grounds and prevented patients from getting away.

It is said the damage will be over $700,000. Officials were enthusiastic in their praise of the fire-fighters who prevented greater property damage and possible loss of life. Three years ago, lightning struck a cupola and started a fire that was soon extinguished.

Hotel Damaged at Chattanooga

Guests escaped wthout personal injury, when fire which started from a defective furnace, destroyed the four-story

Rear of the Glenn Hotel After the Fire

Glenn Hotel in Chattanooga, Tenn. The building was constructed of brick and wood and was fifteen years old.

Fire was discovered in the basement and an alarm was sent in by telephone. When the first company arrived, the entire building was filled with smoke. The alarm brought three engine companies, one aerial and one service truck, and the third alarm seven engines. In all, there were ninety-three firemen at the blaze.

Nine hydrants were within easy reach, and water could be supplied at ninety pounds pressure.

The fire loss on both building and contents was estimated at $80,000. Chief W. M. Toomey was in command at the fire.

WHAT'S BURNING

THE following list includes fires of $25,000 loss and over in the United States and Canada, for the periods designated in the headings. These figures, compiled from telegraphic reports, are based on estimates made at the time, and are subject to later investigation and consequent revision. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousands.

Week Ending May 3

NASHVILLE, TENN.—Residence of Gen. L. Brown..... 25
WAUSAU, WISC.—Plant of Wisconsin Box Co..... 150
HASLETT, MICH.—Lakeside Hotel, adj. property..... 65
KOKOMO, IND.—Bldg. occupied by Kokomo Hardware Co..... 30
PITTSBURGH, PA.—Plant of Liberty Dairy Products Co..... 80
HARTFORD, CONN.—Bldg. occupied by Butler Clothing Co..... 30
COOKEVILLE, TENN.—Cookeville Roller Mills destroyed..... 30
OAKLAND, CALIF.—Fairfax Theatre destroyed..... 150
NEWTON, MISS.—Public school bldg. destroyed..... 50
VERDI, CALIF.—Verdi Box factory and warehouse..... 50
PARKHILL, ONT.—McPhee block destroyed..... 30
STRATFORD, ILL.—Grain elevator and adj. property..... 25
WATERLOO, WISC.—Whses. of Wisconsin Popcorn Co..... 30
LITTLE FALLS, MINN.—Telephone exchange, adj. bldgs..... 300
NORRISTOWN, PA.—Whse. of W. E. Banham..... 30
SIOUX FALLS, S. DAK.—W. A. Burlet whse., adj. bldgs..... 225
BRUNSWICK, GA.—Plant of Brunswick Canning Co..... 25
SAN FRANCISCO, CALIF.—Golden Gate Ave. business bldgs.... 200
BERWICK, PA.—Residence of C. G. Crispin destroyed..... 30
NEWTON, N. H.—First Baptist Church, adj. bldgs..... 65
BINGHAMTON, N. Y.—Garage of Jean Marie Tours line..... 65
EDMONTON, ALTA.—Elevator of Edmonton Grain Co..... 100
FOREST HILLS, N. Y.—R. C. church damaged..... 30
RICHLAND, TEX.—Business property damaged..... 65
CHICAGO, ILL.—Whse. at 22 N. Des Plaines St..... 65
BURLINGTON, VT.—Several department stores..... 250
CHRISTIAN SPRINGS, PA.—Barn of J. Hagenbush..... 25
LAKE PROVIDENCE, LA.—Bldg. of Kilpatrick Motor Co..... 30
SUSSEX, N. B.—Bldg. occupied by W. B. McKay Co..... 65

MUSKOGEE, OKLA.—Entire block of business property..... 150
CHEYENNE, WYO.—Boise-Payette Lumber Co. yards..... 40

Week Ending May 10

MIDLAND BEACH, S. I., N. Y.—Summer colony property..... 200
MASKINONGE, QUE.—Bldgs. of Legris & Boulay..... 25
WILLIFORD, ARK.—Several business bldgs. destroyed..... 25
SAN FRANCISCO, CAL.—Sommer & Kaufmann bldg..... 200
HOLYOKE, MASS.—Summit House, Mt. Tom Ave..... 25
ST. LOUIS, MO.—Business property 810-820 N. 3rd St. 25
WADENA, MINN.—High school bldg. damaged 25
BEACH HAVEN CREST, N. J.—Six frame cottages 40
MORRIS PLAINS, N. J.—N. J. State Hospital, Greystone Park.. 750
PROVIDENCE, R. I.—Business block destroyed 250
OMAHA, NEBR.—Stock of Omaha Crockery Co. 25
HIGHLANDS, S. C.—Country club destroyed 40
MARTINSBURG, W. VA.—H. V. Hart Co., garage 50
BELZONI, MISS.—Two business bldgs. destroyed 25
SOMERVILLE, N. J.—Barn on Duke estate destroyed 30
FREDRICTION, N. B.—Provincial Normal School 165
LOWELL, ARIZ.—Residential district damaged 40
BURNABY, B. C.—Bldg. occupied by Canadian Hatcheries, Ltd. .. 40
ELROD, ALA.—Mill of Pioneer Lumber Co. 80
W. WARWICK, R. I.—Daily bldg. destroyed 40
GADSDEN, ALA.—Broad St. business property 25
CHICAGO, ILL.—Plant of Runzel-Lenz Mfg. Co. 200
DES MOINES, IA.—Grand View College damaged 25
GUNTER, TEX.—G. W. Taylor garage, adj. property 25
MANGUM, OKLA.—Novett bldg. and adj. property 225
WEWOKA, OKLA.—Plant of Wewoka Times-Democrat 60

New Type Siren Tested by Federal

A new type coding siren, operated by a ten horsepower motor, has been installed and tested at Port Jefferson, N. Y., by the Federal Electric Company in the presence of a number of fire department officials.

The rotating elements of the siren are mounted vertically, one above and one below the ten horsepower, three-phase motor. When the circuit is made, both rotors start operating.

By means of a simple lever arrangement, a flat plate of sufficient diameter to cover the opening on top of the rotating element, normally is held in position several inches from this opening. The same holds true for the lower rotor. A small torque motor is mounted at the lower part of the siren. On the shaft of this motor is placed a geared wheel which meshes with a geared sector. Attached to the geared sector is a lever arrangement which operates the two plates.

When the siren starts operating, a suction is created which would normally tend to draw down the plate above the upper rotor, and to suck up the plate placed below the lower rotor. But this action is counteracted by a well balanced spring which has just sufficient force to hold the plates in normal positions. When the torque motor starts operating, sufficient force is applied to draw the plates so that they rest on the flat side of the rotors. This shuts off the supply of air and changes the tone so that it is possible to send out code messages.

In operation, there is a code wheel employed, on the periphery of which is cut teeth to correspond to the number that is desired to be sent. This code wheel is placed in position in a panel box mounted in the fire house. Two circuits are made—one to start the siren in operation, and the other for the torque motor. The rotating element of the siren is always rotating during the time when the alarm is being sent. The code wheel in the panel box so controls the torque motor that the plates are drawn to the flat side of the rotors and then released so as to make short blasts at predetermined intervals. In this way, members of a volunteer department are informed of the location of a fire.

In designing this new type siren, the freezing problem was considered. During foggy weather, the moisture has a tendency to condense on the cold metal and there is a possibility of it freezing. As the plate is normally several inches from the rotor, there is no danger of having the coding mechanism out of order. When the torque motor is started, and the plate is drawn close to the seat, the rotating surface tends to shave off any ice that may be formed on the bottom of the plates.

There are a number of circular deflectors near the horizontal openings of the rotors so as to deflect the sound to the ground where it is desired.

The test was in charge of Mr. Wilson, manager of the signal division of the Federal Electric Company, and A. V. Sammis, eastern district manager. Mr. Sammis was representative for many years for the American-La France & Foamite Company.

Youngstown, O., Firemen Want Pay Increase—Firemen of Youngstown, Ohio, have petitioned for an increase in pay.

Structures Built to Burn

(*Continued from page* 406)

wagon pipe operating from each side of the path of travel of the fire, at the lee end of the burning property, will likely be able to hold the fire from gaining further headway in this direction. As noted above, streams can be directed vertically or nearly so, to aid in wetting down exposed property.

While the deck guns are in operation smaller lines must of necessity be brought into play to check the fire from rekindling or from breaking out again through structures which have been wet down on the outside.

Where grandstands are ablaze, it is a question of spraying the largest possible area in the shortest possible time. Here again large streams with high pressures are required. Even though the streams break up before they hit the fire, they will prove comparatively effective. Furthermore, the presence of the spray in the air before it strikes the burning planks tends to cool the heat waves from the fire and thus aids in protecting exposed property.

There is an another advantage in using heavy streams in fires of this type in addition to wetting down the exposed property as well as the burning structures, and that is in the protection of the men. Where streams are directed vertically or nearly so, the heavy spray may serve to make the position of the men tenable.

In killing fires beneath boardwalks or piers planks can usually be quickly pried up with claw tool, axe, crow bar or other appliances and streams gotten in operation beneath the planks. It will be necessary to use bent cellar pipes or Hart or Baker pipes. This applies particularly where the boardwalk is over water.

If the boardwalk is over the beach, it is quite an easy matter to get streams down low enough to operate under the boardwalk.

In the case of piers, it may be necessary, as noted above, to pry up some of the planks and get cellar pipes into operation to kill fire burning beneath.

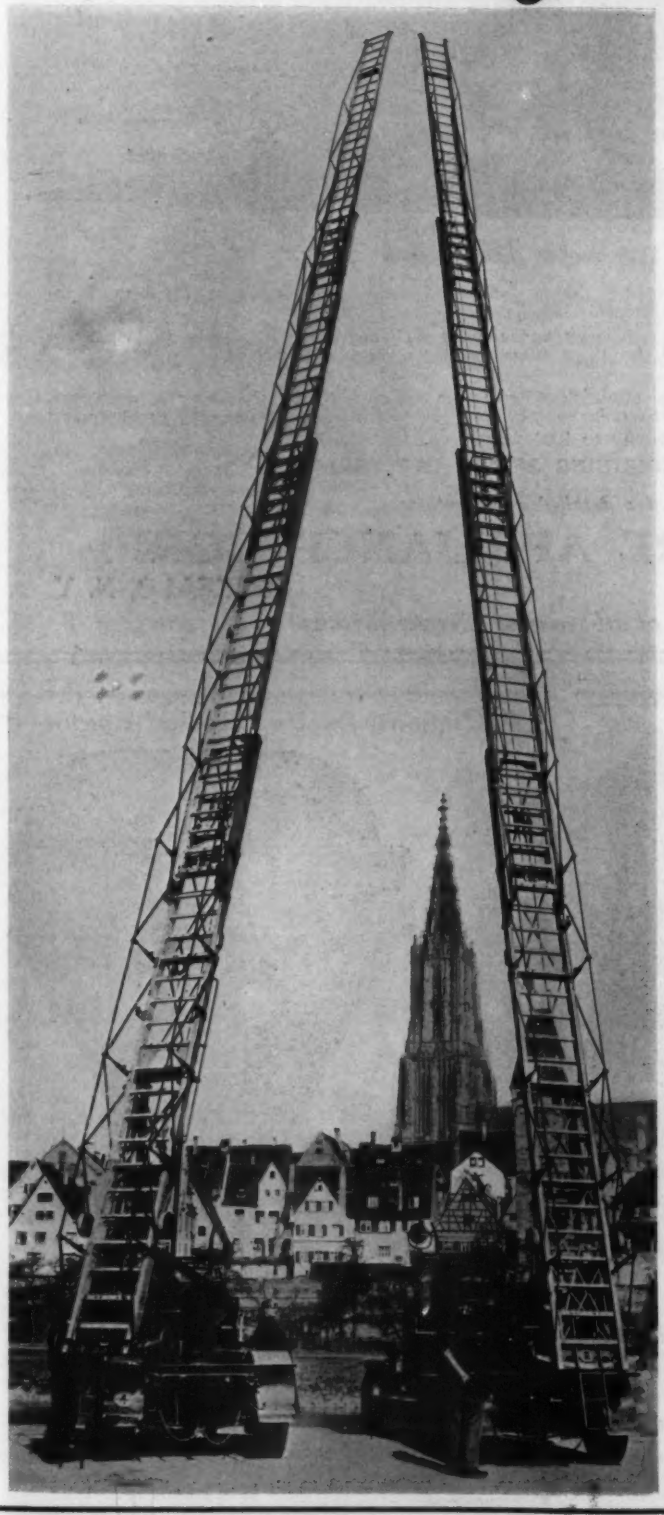
To sum up, fast work and big streams, are the two essentials in handling the average amusement resort fire.

State Firemen to Meet in Greeley, Col.—The Colorado State Firemen's Association will meet in Greeley, July 31-August 2. E. D. Boelter is chairman of the convention committee.

If Only the New Hose Had Arrived

Shortly before a fire broke out in the down town section of Charlotte, N. C., that threatened an entire city block, the city commissioners ordered seven thousand feet of new hose. But at the blaze that started in the abandoned Mecklenberg county court house illustraated at the left, the fire department was hampered by a lot of old, leaky hose. Scenes such as the one pictured at the right were common. But when the new hose will arrive, it will be used to equip two new fire stations now being erected to serve outlying sections of the city.—D. G. SPENCER.

Magirus



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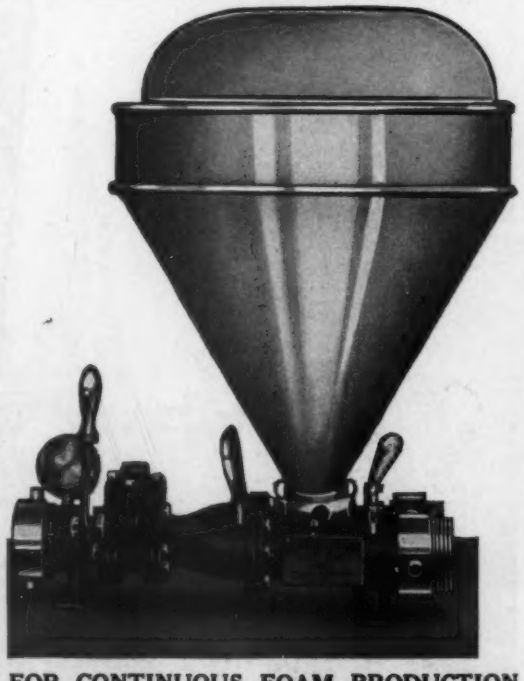

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Chief Dougherty Wins Coveted Medal

The New York Fire Department Administration Medal given annually to the member offering the most progressive device or advancing the best idea for the betterment of the service, has been awarded to Assistant Chief Thomas F. Dougherty, dean of the New York Fire College.

Assistant Chief Thomas F. Dougherty, New York

Chief Dougherty offered for test a new distributing nozzle weighing eighteen pounds. It contains six ¾-inch outlets staggered at various angles and capable of throwing nine hundred gallons a minute. It is small enough to be dropped between floor beams of standard width and is also useful in cock loft fires and in the holds of ships. It is designed chiefly for use with 3-inch hose. It gives a much greater coverage than the old type Bresnan distributor due to its design and to the greater quantity of water, and consequently pressure, which can be supplied by 3-inch hose. Provided with a ball thrust bearing at the lower end, the Dougherty distributor will not bind no matter what pressure is applied to it.

For use in industrial establishments where large open areas are encountered, it is particularly valuable. It is calculated to cover an area from 6 to 8 times as great as that covered by the present type of distributor employing 2½-inch hose.

WM. JEROME DALY.

New York 1929 Medal Winners

(*Continued from page* 412)

back once he succeeded on the second attempt to negotiate the unusual heat and smoke of the upper part of the building and upon finding Mrs. Tyson at the window, he wrapped her in a blanket and carried her back to the stairway and down to the second floor. This rescue was effected before the building had been ventilated and before any of the engine companies had an opportunity to direct water upon the flames.

The Brookman Medal is awarded to Fireman John E. Mess and the Brooklyn Citizens Medal is awarded to Fireman Frederick J. Widmayer, both of Hook & Ladder Company 108 for their heroism early on the morning of April 24th at a fire in a four story frame tenement at 244 Stagg Street, Brooklyn. Fireman Mess ascended a ladder to the third floor where he rescued Mrs. Francis Stellano, fifty-six years, who was prone on the window sill. The firemen placed her on his shoulder and lifted her down to other members of his company. He then carried up a scaling ladder to the fourth floor which he entered and where he found Mrs. Susan Barbaro, thirty-three years, whom he carried down the scaling ladder to the third floor where she was transferred to a 30-foot ladder on which other firemen assisted her to the street. Fireman Widmayer rescued Jennie Stellano, eighteen years, from the third floor window by standing at the top of a twenty-foot ladder.

Bracing himself by his legs Fireman Widmayer called to the woman to drop out of the third floor window above and he caught her in his arms and carried her to the street.

The Kenny Memorial Medal is awarded to Lieut. William J. Carroll (No. 1) and the Prentice Medal is awarded to Fireman Ellis S. Crapper, both of Hook & Ladder Company 123, for their exceptional work at a fire in a four-story rooming house at 261 MacDonough Street, Brooklyn, early in the morning of May 24th. When Hook & Ladder Company 123 arrived, Mrs. Helen Holahan, twenty-two years, was at the fourth floor window, her clothing afire. From the window sill of an adjoining building, Lieut. Carroll and Fireman Crapper leeched across and between them managed to straddle the sills and swing Mrs. Holahan to safety by way of the adjoining building.

The Scott Medal is awarded to Fireman Stephen J. McArdle of Engine Company 22 for his dual rescues at a fire in an old-law tenement at 1634 Second Avenue, early on the morning of December 9th. McArdle, ordinarily assigned as the chauffeur to Battalion Chief Michael F. Ruddy, in charge of the Yorkville district, saw Walter Link, twenty-four years, at the third-floor window. McArdle hustled to the third-floor of the adjoining building and standing on the lintel of the window he reached over to Link and aided him to cross the front of the building to safety. He then went to the fourth floor crossing to the roof of the building afire and there found Edward Smith, an aged cripple, in an unconscious condition on the floor. He carried Smith to the rear fire escape out of harm's way.

The Stephenson Medal for discipline for last year is awarded to Capt. Thomas J. Monaghan of Engine Company 283, located at 214 Bristol Street, Brooklyn. Capt. Monaghan was voted by the Board of Merit as having maintained the mostly highly efficient unit of the Department last year. The Captain was appointed a fireman June 13, 1905 and assigned to Hook & Ladder Company 8 at Varick and North Moore Streets, Manhattan. For fifteen years he served as fireman and lieutenant in some of the busiest downtown fire companies of Manhattan and in 1920 was transferred to Queens. Six years ago he was promoted to a captaincy and that year transferred to his present command which he has maintained at a high standard of efficiency.

The Fire College Efficiency Medals for the Class of 1928 are awarded to the members of Engine Company 33 located in Great Jones Street near the Bowery. In the company drill school on June 13, 1928, this company completed twenty-two evolutions in 17 minutes 15 seconds, the best time made by any competitor last year. The personnel of the company which captured the prize is as follows: Capt. John J. Brennan (No. 2); Lieut. John P. Hill (now Captain of Engine Company 279); Engineer Peter F. Witte (now Lieutenant of Engine Company 30); and the following firemen: Daniel F. Bailey; Vincent P. Fitzsimmons; Louis W. Linhart; Robert Grant; Francis Koehler; Patrick Donovan; Frank L. Maixner; Eugene F. Simon; Andrew Kelly; Patrick O'Keefe; Michael H. McCann and J. P. Ferris.

The Board of Merit consists of Deputy Commissioner Joseph M. Hannon, Chairman; Deputy Commissioner Charles W. Jannicky; Chief John Kenlon; Asst. Chief Jos. B. Martin and Deputy Chiefs Thomas R. Langford; John F. King; Patrick Maher; John Davin and James W. Heffernan; and Mr. Daniel D. Gallagher, who is Secretary of the Board.

Webster Chief at Willimantic, Conn.

The appointment of Wade U. Webster to the office of chief of the fire department at Willimantic, Conn., places a man at the head of the fire-fighting forces who is a well known fire official in Connecticut. Chief Webster replaces Chief Henry J. Kelly who has been forced to resign owing to illness.

Chief W. U. Webster, Willimantic, Conn.

Chief Webster is a native of South Willington, Conn., but removed to Willimantic when he was eight years of age. He joined the fire department as a voluneer on May 4, 1897. From 1902 to 1905 he was assistant foreman of Hose Company No. 1 and from 1906 to 1907 he was foreman of the same company.

Chief Webster has the rare distinction of witnessing the Willimantic department grow from the rope to the motor. That he is an authority on many questions relative to fire fighting is indicated in the fact that he was elected to the presidency of the Connecticut State Firemen's Association, serving in 1915-16. He is also a member of the International Association of Fire Chiefs; the New England Association of Fire Chiefs and the Connecticut Fire Chief Club. It was largely due to the efforts of Chief Webster that the two-platoon system was installed in Willimantic.

THOMAS F. MAGNER.

Denver, Col., to Vote on Pay Increase—A question will be submitted to the voters of Denver, Col., concerning a fifteen dollars a month pay increase for the firemen.

FIRE DEPARTMENT ACTIVITIES

East Liverpool, O., to Abolish Station—Labeled as a menace, the downtown fire station of East Liverpool, Ohio, is to be abandoned. The state fire marshal issued the order.

Butte, Mont., Firemen Want Increase—Figures are being collected to convince the city council of Butte, Mont., that the local firemen are among the poorest paid in the country. The men want an increase from $1,800 to $2,000 a year.

Farmers May Buy Fire Apparatus—A Hudson Farm Fire Association is being formed in Hudson, Ia., to consider the purchase of apparatus for rural protection. The apparatus would be housed and manned by the town of Hudson.

Ohio Cities Must Levy Tax for Pensions—According to a bill that has just been passed, Ohio cities must levy a tax not exceeding 0.3 mills for firemen's pensions, outside all limitations. At present such tax is merely permissible.

Helena, Mont., Asked to Enlarge Department—Local insurance men and the Pacific Board of Fire Underwriters have asked that the fire department in Helena, Mont., be enlarged. A new fire survey is to be made.

Burlington, Ia., Chief to Retire—Chief L. F. Blank of Burlington, Ia., since 1902 and a member of the fire department for over forty years, has been placed on the pension list. Frank Ostertag, a member of the department since 1907 has been named to fill the vacancy.

New Drill Tower Erected in Los Angeles—A new six-story drill tower is being completed in Los Angeles, Cal., for fire department practice. The basement of the structure will include a smoke room where gas masks and sprinklers will be tested.

Toledo, O., May Have Fire Prevention Bureau—The finance committee of Toledo, Ohio, favors the establishment of a fire prevention bureau. It is planned to assign a lieutenant to be in charge of the work. The city has not decided on a site for the erection of a new fire station.

Many Bids Submitted for Binghamton, N. Y., House—Bids were opened for the construction of a fire house in the Sixth Ward of Binghamton, N. Y. Plans and specifications were prepared by the Bureau of Engineering. The building will be of the bungalow type.

Wellsboro, N. Y., Considering Fire Protection—A committee of Wellsboro, N. Y., merchants conferred with Lieutenant Arthur W. Espey of Elmira, N. Y., on reorganization of their fire department. Members of the department will be sent to the Elmira Zone State Fire School.

Des Moines Firemen Vote for Pay Reduction—A large percentage of Des Moines, Ia., firemen voted to take a voluntary two weeks layoff without pay to aid the city council in meeting expenses for the next fiscal year. According to the plan, the voluntary vacation would be taken any time during the year, or possibly either before or following their regular two weeks vacation.

Many Expected at Ames Fire School—Nearly three hundred firemen are expected to attend the short fire course conducted by the engineering extension department of the Iowa State College at Ames, May 21. This will be the fifth short course conducted by the college. It will be in charge of L. J. Murphy, municipal engineer. Those who will assist are Frank C. McAuliffe, chief of Chicago Fire Patrol, Clarence Goldsmith, assistant chief engineer of the National Board of Fire Underwriters, and others.

The Round Table

(*Continued from page* 408)

owned by suspects. I believe the insurance companies hold the only remedy of preventing a great many incendiary fires

J. R. Eldridge, Chief, Johnson City, N. Y.: Fortunately we have been very free from incendiary fires. However, every fire is investigated and when there is any indication of arson, we go the limit to secure convictions.

We maintain monthly inspections which are bound to keep people from deliberately setting fires.

J. Ralph Eddie, Chief, Webster Groves, Mo.: We are not troubled with incendiary fires. In the few fires we have had from this source, the guilty parties were arrested and prosecuted.

All fires are investigated no matter how small the damage may be.

F. A. Jaynes, Chief, Rochester, N. Y.: A report of all incendiary fires is turned over to the police for investigation, but usually the grand jury fails to make an indictment.

Robert Stinson, Driver, Beardstown, Ill.: The state fire marshal is advised of all fires of a suspicious nature. Thorough investigations are made. This has proven very effective.

Wm. R. Funke, Chief, Centralia, Ill.: Every effort should be taken to apprehend all violators and if convictions are made the guilty persons should be punished to the full extent of the law.

Answer to Previous Question

J. E. Taplin, Chief, Blackwell, Okla.: We have not been troubled to a great extent with the false alarm question. A few times in the past when volunteers were paid two dollars per call, a few false alarms were turned in. The method of paying volunteers has been changed and at the present time one hundred dollars is paid monthly to fifteen call men, regardless of the number of fires they respond to. This amount is divided between them in proportion to the services rendered and attendance at weekly drill periods.

Since this method of paying the men has been adopted, we have had no false alarms.

We depend entirely upon the telephone for receiving alarms. This consequently removes the temptation for the mischief maker to pull a fire alarm box.

Five Fire Bills Signed in Rhode Island

Although only organized but one year, the Fire Chiefs' Club of Rhode Island has had five bills introduced in the state legislature, all of which were approved and signed by the governor.

According to the new laws, executive officers of a paid or volunteer fire department shall, in the absence of the chief of police, have the power to suppress any tumult or disorder and to request the assistance of inhabitants in fighting fires and to protect property exposed to fire. Any person who refuses to render such assistance or shall interfere with an officer shall be subject to fine.

Officers or members of the fire department are given power to inspect all buildings, structures and places of business in their respective towns for fire menaces. The inspections must be made with the consent of the chief. If refuse is found, it can be ordered removed. In case such material is not removed within forty-eight hours after the notice was given, the inspector can have the refuse removed and the cost charged to the occupant of the premises.

If a person performing the duties of a fireman is killed or dies within sixty days from injuries received while in the performance of his duties, the treasurer shall pay $750 for the use of the widow and minor children. If there is no widow or children, the sum shall be paid to the nearest next of kin, providing they were dependent upon the deceased fireman for support.

Any city or town may annually appropriate a sum for the use of the fire department for equipment, property, salary or other expenses in connection with fire fighting or suppressing fire hazards.

Every asylum, alms house, hospital and orphanage having more than ten inmates and every school located in a district having a general fire alarm system, shall have a fire alarm box installed. The expense of installing and connecting the fire alarm box to the fire alarm system must be borne by the person or corporation owning or operating the schools or asylums, if under private control—otherwise by the city having jurisdiction.

The various bills were prepared by Sigmund W. Fischer, Jr., assistant attorney general, and were presented by Senator Daniel F. McLaughlin, East Providence.

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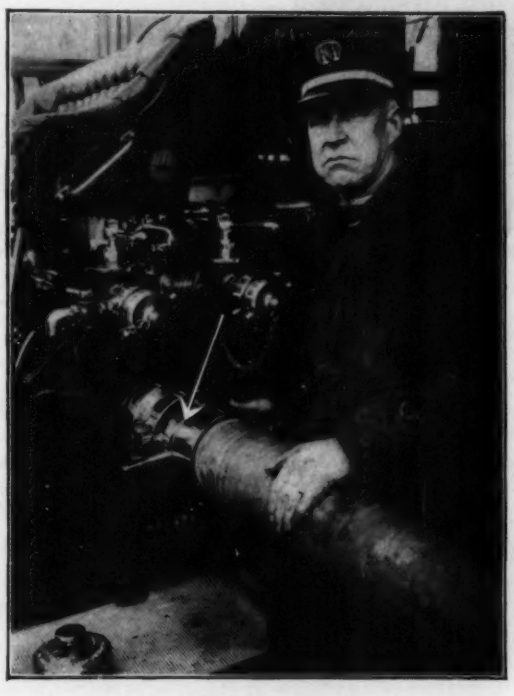

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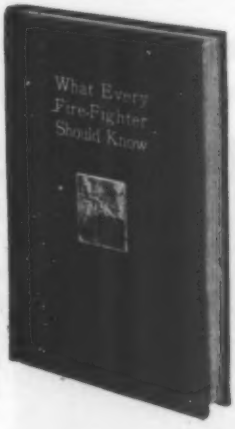

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.....Copies of Questions and Answers for Lieutenant and Captain at $2.65 each.

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Quaker FIREFITE Brand, made in single, double or multiple jacket, meets all requriements of municipal or factory departments.
FIREFITE is built to Underwriters' specifications, stands high pressures, and is easily coiled.

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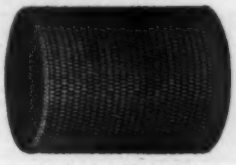

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Over 1,300 sets of Anderson-Hale Fire Station Door Openers are in successful use. They provide simple, durable, quick-acting doors that open inward. No obstruction to sidewalk. Attractive in appearance, cannot sag, closes tight, excludes cold, gives clear opening.
Opens from driver's seat or from floor. Many repeat orders from users.

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Full Line Fire Dept. Supplies and Equipment

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The Woodhouse Mfg. Co., Inc.
156 Chambers St., New York

D. A. Woodhouse, Pres. and Gen. Mgr. — George J. Kuss, Vice-Pres. and Treas.

PROPOSED IMPROVEMENTS

Newington, Hartford Co., Conn.—Plans have been completed for erection of three new fire stations here, according to reports.

Valhalla, Westchester Co., N. Y.—Valhalla Fire District voted in favor of appropriating $15,000 for purchase of new pumper.

Ozark, Dale Co., Ala.—At election held April 23 city voted in favor of a $36,000 bond issue, part of which is to be for purchase of a new piece of fire apparatus.

Omaha, Douglas Co., Nebr.—National Board of Fire Underwriters recommended the construction of an isolated fire alarm headquarters building fully equipped with capacity for at least 30 box circuits and 10 alarm circuits.

Chattanooga, Hamilton Co., Tenn.—A three-year progressive program of improvement of fire equipment was recommended by fire rate facts-finding committee which has been investigating conditions. To include three new fire stations, improvements in fire alarm system and a large number of additional fire hydrants.

Napa, Napa Co., Calif.—Fire department making plans for purchase of new fire truck. A fire district is to be formed and the matter submitted to the voters.

Allentown, Lehigh Co., Penn.—City Council passed resolution authorizing the construction of a fire station at Greenleaf and Bayard streets, according to reports.

Galesville, Anne Arundel Co., Md.—City considering purchase of pumper for protection in West River section.

Eaton, Preble Co., Ohio—Plans under consideration for purchase of community fire apparatus, according to reports.

Wanted

District Representatives for an old established and complete line of apparatus and equipment. Exclusive territories and satisfactory arrangements to competent men. Address Box 165, c/o Fire Engineering, 225 W. 34th St., New York.

5-1, 15, 29

CONVENTION DATES

May 13-16—NATIONAL FIRE PROTECTION ASSOCIATION (International). 33rd Annual Meeting Memphis, Tenn. Technical Secretary, Robert S. Moulton, 60 Batterymarch Street, Boston, Mass.

May 27-30—OKLAHOMA STATE FIREMEN'S ASSOCIATION— 35th Annual Convention and State Firemen's Training School, Muskogee, Okla. Director of School, Chief J. E. Taplin, Blackwell, Okla. Secretary, Charles Slemp, 820 East 19th Street, Oklahoma City.

June 3-6—KANSAS STATE FIRE CHIEFS' AND FIREMEN'S ASSOCIATIONS, WOMAN'S AUXILIARY and FIRE SCHOOL. Respectively 14th, 43rd, 4th and 1st conventions and meetings, Newton, Kansas. Secretary for both Associations, Chief K. D. Doyle, Wamego.

June 5-6—IOWA ASSOCIATION OF FIRE FIGHTERS. 7th Annual Convention, Hotel President, Waterloo, Ia.

June 5-7—OREGON STATE FIRE CHIEFS' ASSOCIATION. 10th Annual Convention, Tillamook, Ore. Secretary, Thomas Coates, Tillamook.

June 7-8—DAUPHIN COUNTY FIREMEN'S ASSOCIATION. 11th Annual Convention, Harrisburg, Pa. Chairman Local Committee, W. L. Jauss.

June 10-12—SOUTH CAROLINA STATE FIREMEN'S ASSOCIATION. 24th Annual Convention, Columbia, S. C. Secretary, R. S. Hood, Sumter, S. C.

June 11-13—FIRE CHIEFS' ASSOCIATION OF OHIO. (Change of date.) 12th Annual Convention, Assembly an Exhibit Rooms, Dodge and Smith Motor Sales Company Building, Sandusky, Ohio. Secretary-Treasurer, Chief Philip J. Harty, Fire Dept., Youngstown Sheet & Tube Company, Ohio.

June 11-15—TEXAS STATE FIREMEN'S ASSOCIATION. Annual Convention, Galveston, Tex. Secretary, Olin Culbertson, Hillsboro, Tex.

June 12-13—NORTHERN INDIANA INDUSTRIAL AND VOLUNTEER FIREMEN'S ASSOCIATION. 24th Annual Convention, Bremer, Ind. Secretary-Treasurer, Hugh Russell, Bluffton, Ind.

June 12-14—MARYLAND STATE FIREMEN'S ASSOCIATION. 37th Annual Convention, Lonaconing, Md. Secretary, George R. Lindsay, Hagerstown, Md.

June 14-15—DELAWARE COUNTY FIREMEN'S ASSOCIATION. 23rd Annual Convention and Parade, Clifton Heights, Pa. Secretary, William E. Wunderlich, Lansdowne, Pa.

June 15—LEBANON COUNTY FIREMEN'S ASSOCIATION. Annual Convention, Myerstown, Pa. Secretary, William I. Kutz, Box 233, Myerstown, Pa.

June 18-20—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 40th Annual Convention, Hendrick Hudson Hotel, Troy, N. Y. Secretary, Chief Chris. W. Noll, Fire Department, Poughkeepsie, N. Y.

June 18-20—NEW YORK STATE ASSOCIATION OF FIRE CHIEFS. 23rd Annual Convention, Binghamton, N. Y. Secretary, Chief James H. Golden, Fire Department, Cohoes, N. Y.

June 18-20—NORTH DAKOTA FIREMEN'S ASSOCIATION. 45th Annual Convention, Bismarck, N. Dak. Secretary, H. L. Reade, Bismarck.

June 19—NORTHWESTERN OHIO VOLUNTEER FIREMEN'S ASSOCIATION. 56th Annual Convention, Ashland, Ohio. Secretary, C. R. Bowersox, 430 Richardson Bldg., Toledo, Ohio.

June 20-22—WASHINGTON STATE FIREMEN'S ASSOCIATION. 7th Annual Convention, Everett, Wash. Secretary, H. S. Jenkins, City Electrician, Fire Headquarters, Bellingham, Wash.

June 21-July 7—INTERNATIONAL EXHIBITION OF FIRE APPARATUS AND CONGRESS OF WORLD FIRE PREVENTIONISTS. Under the patronage of the President of the French Republic, at the Grand Palais, Paris; 44th Annual Congress of the French Federation, Paris. General Secretary, Commandant G. Wattremez. Grand Palais, Avenue Alexandre III, Paris.

June 22-23—SOUTHERN CALIFORNIA FIRE CHIEFS' CLUB. 2nd Annual Convention, Ventura, Cal. Secretary-Treasurer, G. E. Zimmerman, Fire Department, Coronado, Cal.

June 24-28—AMERICAN WATER WORKS ASSOCIATION. 49th Convention, Hotel Royal York, Toronto, Ont., Can. Secretary, Beekman C. Little, Rochester, N. Y. Office of Association, 29 West 39th Street, New York City.

June 25-27—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. 7th Annual Convention, Hotel Taft, New Haven, Conn. Exhibits, Second Regiment Armory. Secretary-Treasurer, Chief John W. O'Hearn, Watertown, Mass.; Chairman, Exhibits, Chief John S. Pachl, Annex Fire Department, New Haven; Traffic Manager, Geo. F. Cobb, Boston.

June 25-28—SOUTH DAKOTA FIREMEN'S ASSOCIATION. 13th Annual Convention, and Tournament, Hot Springs, S. Dak. Secretary, M. C. Sullivan, Parkston, S. Dak.

July 3-4—WYOMING STATE FIREMEN'S ASSOCIATION. 3rd Annual Convention, and Tournament, Laramie, Wyo. Secretary, Chief Justin H. Patrick, Laramie, Wyo.

July 9-11—MICHIGAN STATE FIREMEN'S ASSOCIATION. 55th Annual Convention, Sault Ste. Marie, Mich. Secretary, H. L. William, Ludington, Mich.

July 9-12—DOMINION ASSOCIATION OF FIRE CHIEFS. 21st Annual Convention, Coburg, Ont. Secretary, Chief James Armstrong, Kingston, Ont.

July 10-11—DELAWARE VOLUNTEER FIREMEN'S ASSOCIATION. 9th Annual Convention, Wilmington, Del. Secretary, Sam H. Carson, Dover, Del.

July 11-12—EASTERN ASSOCIATION OF FIRE CHIEFS. (Change of date.) 2nd Annual Convention, Hotel Pennsylvania, New York City. Secretary, T. Howell Johnson, Room 602, Chamber of Commerce Bldg., Newark, N. J.

July 15-16—MONTANA STATE FIREMEN'S ASSOCIATION. 38th Annual Convention, Butte, Mont. Secretary-Treasurer, D. E. Moser, Bozeman, Mont.

July 15-19—NORTH CAROLINA STATE FIREMEN'S ASSOCIATION. Annual Convention, Hendersonville, N. C. Secretary, John L. Miller, Concord, N. C.

July 15-20—MARITIME FIRE CHIEFS' CONVENTION AND TOURNAMENT. 14th Annual Convention, Moncton, N. B. Secretary, Captain K. J. McCrea, St. John, N. B., Can.

July 17-19—INDIANA FIREMEN'S ASSOCIATION. 12th Annual Convention, Gary, Ind. Secretary, Clem Smith, Fire Headquarters, Terre Haute, Ind.

July 23-26—PACIFIC COAST ASSOCIATION OF FIRE CHIEFS. 36th Annual Convention, Vancouver Hotel, Vancouver, B. C. Secretary, Jay W. Stevens, 113 Merchants Exchange Bldg., San Francisco, Cal.

August—IDAHO FIREMEN'S CONVENTION. Tentative, August or September, Idaho Falls, Ida. Secretary-Treasurer, Earl Heath, Idaho Falls.

August—MAINE STATE FIREMEN'S ASSOCIATION. 2nd Annual Convention (tentative, exact time to be announced later), Waterville, Me. Secretary, Earl E. Pratt, Fire Department, Auburn, Me.

August—UTAH STATE FIREMEN'S ASSOCIATION. 22nd Annual Convention (tentative, to be decided later), Tooele City, Utah, Secretary, Harris E. Anderson, Fire Headquarters, Salt Lake City, Utah.

Aug. 7-9—CALIFORNIA STATE FIREMEN'S ASSOCIATION. 7th Annual Convention, Fullerton, Cal. Secretary-Treasurer, H. E. Strasser, 1171 Tenth St., San Diego, Cal.

Aug. 7-9—SOUTHWESTERN ASSOCIATION OF VOLUNTEER FIREMEN OF NEW YORK. Annual convention, Falconer, N. Y. Secretary, Royce Alden, Falconer, N. Y.

Aug. 16-17—CONNECTICUT STATE FIREMEN'S ASSOCIATION. 46th Annual Convention, Plaza Theatre, East Hartford, Conn. Secretary D. W. Hartford, South Norwalk.

Aug. 20-23—FIREMEN'S ASSOCIATION STATE OF NEW YORK. 57th Annual Convention, Saranac Lake, N. Y. Secretary, Fred A. Davis, Fort Edward, N. Y.

Aug. 26-28—NEW MEXICO STATE FIREMEN'S ASSOCIATION. 7th Annual Convention, Gallup, N. M. Secretary-Treasurer, Theodore A. Rosenwald, Albuquerque, N. M.

Aug. 28-30—VIRGINIA STATE FIREMEN'S ASSOCIATION. 43rd Annual Convention, Lexington, Va. Secretary, E. K. Landis, Pulaski, Va.

Sept. 3-5—KENTUCKY STATE FIREMEN'S ASSOCIATION. 1st Annual Convention, Ashland, Ky. Secretary, Captain S. G. Render, 303 Speed Bldg., Louisville, Ky.

Sept. 9-11—ARKANSAS STATE FIREMEN'S ASSOCIATION. 8th Annual Convention, Camden, Ark. Secretary-Treasurer, H. D. Compton, Central Fire Station, Little Rock, Ark.

Sept. 10-12—ILLINOIS FIREMEN'S ASSOCIATION. 42nd Annual Convention, Joliet, Ill. Secretary, Assistant Chief Roy W. Alsip, Fire Department, Champaign, Ill.

Sept. 17-18—IOWA STATE FIREMEN'S ASSOCIATION. 52nd Annual Convention, Red Oak, Ia. Secretary, E. E. Parsons, Marion, Ia.

Sept. 18-19—MISSOURI ASSOCIATION OF FIRE FIGHTERS (Consolidated with former Missouri State Association of Fire Chiefs). Annual Convention, Jefferson City, Mo. Secretary, M. J. Mulvoy, 3500 S. Grand Boulevard, St. Louis, Mo.

Sept. 20-21—NEW JERSEY STATE FIREMEN'S ASSOCIATION. 52nd Annual Convention, Atlantic City, N. J. (Tentative date, to be definitely set later by Executive Committee). Secretary, William Exall, Room 602, Chamber of Commerce Bldg., Newark, N. J.

Oct. 1-3—FIREMEN'S ASSOCIATION OF THE STATE OF PENNSYLVANIA. 50th Annual Convention, Hotel Roosevelt Pittsburgh, Pa. Secretary, Charles E. Clark, P. O. Box 217, Wayne, Pa.

Oct. 15-17—RAILWAY FIRE PROTECTION ASSOCIATION. Annual Meeting, Toronto, Can., Secretary-Treasur, R. R. Hackett, Baltimore & Ohio Railroad, Baltimore, Md.

Oct. 22-25—INTERNATIONAL ASSOCIATION OF FIRE CHIEFS. 57th Annual Convention, Hotel Tutweiler, Birmingham, Ala. Exhibits City Auditorium. Recording Secretary, Chief James J. Mulcahey, Yonkers, N. Y.; Executive Secretary, Jay W. Stevens, 113 Merchants Exchange Bldg., San Francisco, Cal.; Chairman, Exhibit Committee, Chief Selden R. Allen, Brookline, Mass.

Chiefs' Club Honors John Campbell

John Campbell, for many years Superintendent Special Service Department of the Edison Electric Illuminating Company of Boston has been elected to honorary membership in the Massachusetts Fire Chiefs' Club and the New England Association of Fire Chiefs. At a recent meeting of the chiefs' club, Mr. Campbell delivered an address on "Underground Cables". His long service in the electrical field has made him an authority on the fire hazards of electricity.

FALSE ALARMS

PLANNING AHEAD

An urgent call was received from a house in a new development. When the first company arrived, a prominent local realtor and a young couple were standing on the front steps. The realtor held a watch in his hand.

"Where's the fire?" asked the officer.

"No fire this time, officer. These people, before they bought the house, wanted to see how soon you'd come, in case they did have a fire. You did it in exactly three minutes."

The repair shop mechanic never fails to hear opportunity knocking.

SCIENCE IN SIGNS

Everywhere one hears talk about science—science of business, science of fire-fighting, and so forth.

When the little boy came home from school he asked.

"Papa, what is science?"

To which the papa replied, "My, how could you be so dumb! Science is dose things vat says, 'No Smoking.'"

JUST EGGED ON

A man recently applied for settlement of a claim for fire insurance. The agent asked, "Much damage?"

"Not much," the man replied, "just a door."

"How much would a new door cost?"

"About five dollars."

"When did the fire happen?"

The man hesitated a moment and then said, "About thirty years ago."

The agent was very much surprised at this and said, "And you have waited all these years to report it?"

"Yes, sir."

How is that?"

"Well, sir, the women folk at my house have been at me to do something about that door ever since it was burned, and I just couldn't stand it any longer."

VERY WELL PLANNED

A lawyer received the following letter from a client:

"Dear Sir: My boy got struck by an automobile, No. 4930-4D. It was a red car. If it belongs to the fire chief sue him at once. The boy wasn't bruised any, but on your notifying me that you have brought suit, I will hit him in two or three places with a hammer."

Cave men used to knock girls senseless. That of course, isn't necessary now.

ONE LONG STEP

Anything that is funny appears to happen to the Irish. So too with two firemen, members of a truck company, who were inside a burning building. Mike mistook an elevator shaft for something else and plunged down three floors.

His friend missed him, and hearing moans, looked down the shaft.

"Are ye there, Mike?" he called.

"Yis," replied Mike. "But be careful when you come down. That first step is terrible."

TRAFFIC RULES

With bell clanging and siren blowing, the truck company rounded the corner headed for the main thoroughfare. And in the center of the main road was Mr. Jones—yes, poor Mr. Jones. Cold sweat oozed from his brow.

"Good night! Out of gas right here in the middle of the street and the damn engines coming on."

"Well, you can't stop for that," shouted the more practical Mrs. Jones. "Better move on, here comes a cop."

A girl may wear a golf suit and not play golf, and a bathing suit without going in the water, but when she puts on a wedding gown she means business.

WITH THE EXTRAS

The chief was showing a visitor about the station.

"See that fire engine? Isn't she a beauty? She cost $13,000."

The visitor seemed surprised and remarked, "I didn't think that fire engines cost as much as that."

"Oh, actually she only cost eight thousand, but we spent the balance on repairs.

HE MEANT IT

At last Station 4 was completed, and it was time to prepare for the inauguration ceremonies. Orders were given to erect a temporary platform outside the house for the speakers. When the ward politician arrived, the man who was hired to erect the stand was still working.

"I thought you said that you could do this job in an hour."

"Yes, sir," remarked the carpenter, "I'll do that job in an hour if it takes me all day."

MERELY AN ERROR

The department ball was a success, judging by the large crowd in the Odd Fellow hall. As most of the men came "well oiled" it did not take long for the crowd to know each other. A visitor said to the floor chairman:

"Who is that awful looking woman over there?"

"Why, that's my wife."

The visitor was ill at ease. "Oh—pardon me—my mistake."

"Oh no," replied the chairman sadly, "my mistake."

Then there was the "bachelor girl" who wouldn't undress with the *Christian Observer* in the room.

A BIG HANDICAP

The chief was noted for two things—he was very friendly to the townspeople and he was gifted with an unusual sense of humor.

A colored boy whose one delight was to admire the red painted car, saw the chief and called:

"Say, chief, why doesn' yo' all put a self statah on yo' car?"

"I would, son," replied the chief, "but I don't want my car to go off when I'm not around."

EMBARRASSING

One fireman lived on Spruce street and he had a son who was very fond of his father's occupation. Every time that the apparatus would dash by the youngster would shout as loud as possible, "Hello, daddy."

On a pleasant afternoon a young stock broker with a red-painted roadster in which was a most attractive girl, went rolling down Spruce street. The little boy noticed the car and called:

"Hello daddy."

Eight good resolutions, pure as stars in heaven. It was dark in the movies so now there are seven.

Drawing by "Art" Espey

Fire "Belle" is more like it.

THE FAVORITE

THROWS 600-FOOT BEAM (⅛ MILE)

for the Fire Fighter

A Powerful Portable Electric Searchlight

The EXCELLIGHT is always ready, safe, powerful, economical and simple. It is moisture and waterproof, which eliminates short circuits and greatly increases the life of the batteries. The EXCELLIGHT is indispensable, especially around places where inflammable materials are stored or manufactured.

With ordinary use the batteries will last for many months and can be replaced at small cost. Batteries are standard.

DURABLE
SIMPLE
ECONOMICAL
WATERPROOF
NON-CORROSIVE
INDISPENSABLE

Used and endorsed by Fire Departments, Railroads and Police Departments. Always dependable.

Write for sample, full information and special net prices to fire departments.

THE NATIONAL MARINE LAMP CO.
Dept. F. Forestville, Conn.

BRAXMAR BADGES

Standard for Fifty Years

1879

1929

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C. G. BRAXMAR CO.
242 West 55th St., New York

MATHEWS
(Reg. U. S. Pat. Off.)
FIRE HYDRANTS
for
DOMESTIC
and
HIGH PRESSURE
Service

NOTE—

The positive waste value.

All operating threads are dry, being above the stuffing-box .

No toggles, no small, quick-wearing parts.

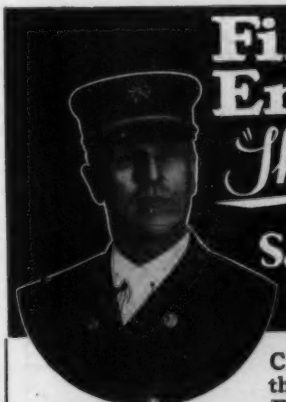
All moving parts are bronze or bronze-bushed.

The outside casing permits replacing a two-way standpipe with a steamer and two-way standpipe without digging up the ground.

An easily installed
EXTENSION SECTION
readily adapts them to new grade.

VALVES and BOXES
CAST IRON PIPE
Sand-Cast or "Sand-Spun"
FITTINGS

R. D. WOOD & CO., Phila., Pa.



Fire Chief Endorses "Shuredry" WATERPROOFED Salvage Covers

Chief J. R. Eldridge of the Johnson City, N. Y., Fire Department says, "We are still using your 'Shuredry' Salvage Covers and have been for several years. We find them the most satisfactory equipment of this kind we have ever used in our Department."

"Shuredrys" cost less, weigh less and are easier to handle than rubber covers. They do not crack when folded.

Write for samples and prices.

Fulton Bag & Cotton Mills
Manufacturers since 1870

Atlanta Dallas Brooklyn St. Louis
Minneapolis Kansas City, Kan. New Orleans

How the Law Helps the Fireman

(*Continued from page* 404)

The facts of this case are that a man named Barry was an active member of the paid fire department of a municipality and, also, a member in good standing of the fire department relief association of that city.

In the articles of incorporation of the association, it is provided that, whenever any active member of the association in good standing becomes incapacitated from performing his duties as an active fireman, by reason of sickness or accident, he shall be paid from the firemen's disability fund his regular monthly salary.

On April 1, Barry contracted an illness in the line of his duties as fireman, and was compelled to remain away from his work from that day until June 23rd. During that period his salary amounted to $415. He presented a claim for that amount to the board of trustees of the association, which rejected it. He thereupon appealed to the association. Upon hearing of the appeal, a resolution was passed in effect directing that it be ascertained whether the city would pay the claim, with a proviso that, if the city would not, then the claim should be paid in full out of the firemen's disability fund. The city refused to pay, and the president and secretary refused to sign a warrant in Barry's favor, authorizing payment of the $415, in view of a conflicting law, which authorized payment of a service pension equal to one-half the salary of any fireman who shall have "become maimed or disabled for life in line of duty, or who has contracted sickness in line of duty."

In holding the fireman entitled to his full salary, the Court said:

"Each of these two laws covers some of the same ground covered by the other. In other words, in certain respects they are duplicates. This is one illustration of the bungling manner in which the subject has been legislated upon. . . . A service pension granted to a member who by reason of service has become entitled thereto is one thing, and a benefit or allowance to the member who has contracted sickness in the line of duty is quite another thing. We think it is likewise clear that the provision that the service pension shall not exceed one-half of the monthly salary last received by the member has no application to the benefit allowed to a member who has contracted sickness in the line of duty."

Meaning of Term of "Shall Have Been in City Service"

In McCarthy vs. Civil Service Commission of City and County of San Francisco, 273 Pac. 98, it was shown that a fireman was employed in municipal service from September, 1917, to March, 1921, except while in the army. He returned to service as hoseman in the fire department in August, 1926, and contended that he was entitled to additional credits in promotional examinations, although his service had not been continuous under the following law:

"In the case of promotional examinations a credit of three points shall be allowed to veterans who shall have been in the city and county service prior to July 1, 1920."

It is interesting to observe that the Court held the fireman entitled to the additional credits, saying:

"It is the contention of the appellant (city) that the expression 'shall have been' should be interpreted to apply only to such veterans who had been in the city service prior to July 1, 1920, and who had remained continuously in such service thereafter until the time of the promotional examinations. . . . We must bear in mind that the words 'shall have been' are applied to past as well as to future conditions. . . . In a strictly grammatical sense the phrase, standing alone, conveys the idea of futurity. . . . The phrase or its equivalent is frequently found in statutes and constitutions and the cases show that it is applied to past as well as to future acts or conditions."

Duty of Property Owner to Prevent Fires

While it is true the owner of private buildings is not compelled by law to exercise any particular degree of care to safeguard his property against destruction by fire, yet, it is important to know that various other property owners are bound to exercise care to prevent fires otherwise they are liable in damages.

For instance, a warehouseman is liable in damages for the loss of stored goods as a result of his negligence, irrespective of the fact that a clause in the warehouse receipt, signed by the owner of the goods, relieves the warehouseman from liability.

For example, in the recent case of Benz vs. Monarch Transfer & Storage Co., 9 S. W. (2nd) 822, it was disclosed that an owner delivered to a warehouse a quantity of goods for storage. A warehouse receipt was given, in which it was agreed that the warehouseman should not be liable for fire, or any other cause beyoung the warehouse company's control. Later the owner of the merchandise was informed that a fire had mysteriously started in the warehouse and had destroyed his goods, he sued the warehouseman for damages.

The warehouseman argued that he could not be held liable because the warehouse receipt clearly relieved him from responsibility for the loss of merchandise by fire, and also because neither himself nor employes negligently caused the fire.

However, the jury carefully considered all details of the testimony and held the warehouseman liable. The higher Court sustained this verdict, saying:

"Here, we have a building of concrete, divided into compartments, the building itself fireproof, no one but the employes having access to the storage rooms and still a fire breaking out. . . . We think that if defendant (warehouseman) had not been guilty of negligence, a fire would not have occurred in this compartment."

Still another common source of litigation involving warehousemen is where the warehouse and its contents are destroyed by fire at night-time.

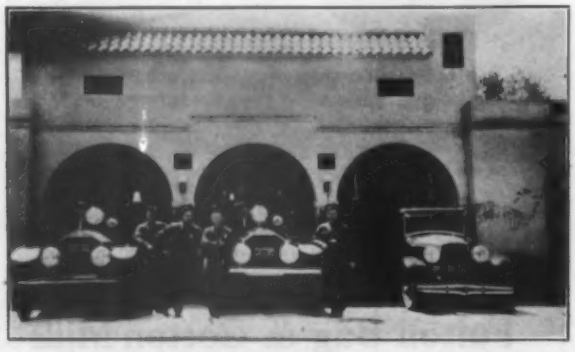
This phase of the law was discussed in the case of American Transfer & Storage Co. vs. Rush, 8 S. W. (2nd) 756. Here it was disclosed that the warehouseman did not provide a capable night watchman and modern fire extinguishment equipment. The result of this testimony was that the jury held the warehouseman negligent and therefore liable for the loss of the stored goods.

It is also important to know that any person who agrees to keep property, merchandise, or any other commodity, for another, is bound to exercise the same degree of care to prevent loss or injury to the property as a result of fire.

Moreover, any firm or person who holds himself out to the public as being ready and willing to accept merchandise is legally a common carrier and liable as an insurer against loss or injury to goods by fire.

For instance, the law with respect to the liability of a common carrier applies to any firm or person such as an expressman, a railroad, a motor truck transportation company, an express company, a storage or warehouse company, and the like.

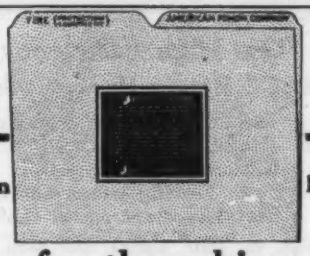
In fact, the carrier is liable for all loss resulting from its own negligence, and against all other loss or damages, except such as may be caused by the act of God, a public enemy of the United States, the act of the shipper, or the inherent nature of the goods. Moreover, although the damage is due to one of these causes, the carrier still is liable for any damage which may result by its failure to exercise reasonable care to protect the shipment from such loss or damage.



New Fire House in Service in Roswell, N. M.

A fire station manned by twelve men and housing three pieces of apparatus, has been placed in service in Roswell, N. M. The house is one story high, constructed of concrete. The total cost is $12,000. There are six individual rooms with built-in closets. There is a recreation room in the rear of the apparatus floor. A basement was excavated for a heating plant.

Waukesha Engine Issues "Insurance Policy"—In an effort to make the purchaser better acquainted with the mechanism of this engine which many manufacturers install in fire apparatus, the Waukesha Motor Company has issued a "Waukesha Engine Insurance Policy." It consists of a booklet in an envelope similar to the kind used for insurance policies. The booklet tells what to do and what not to do to get the most from the engines.



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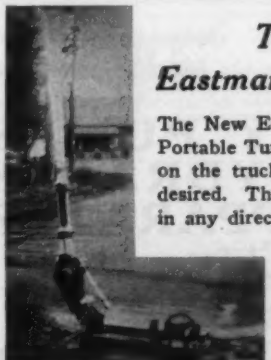

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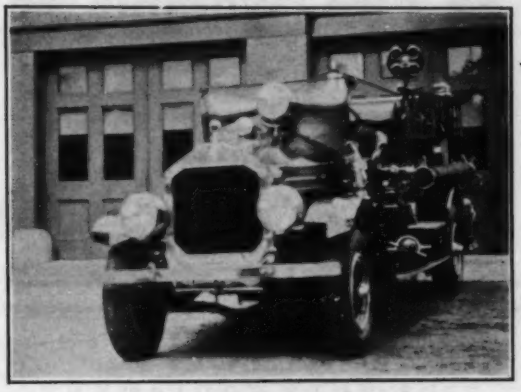

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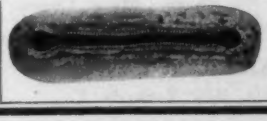

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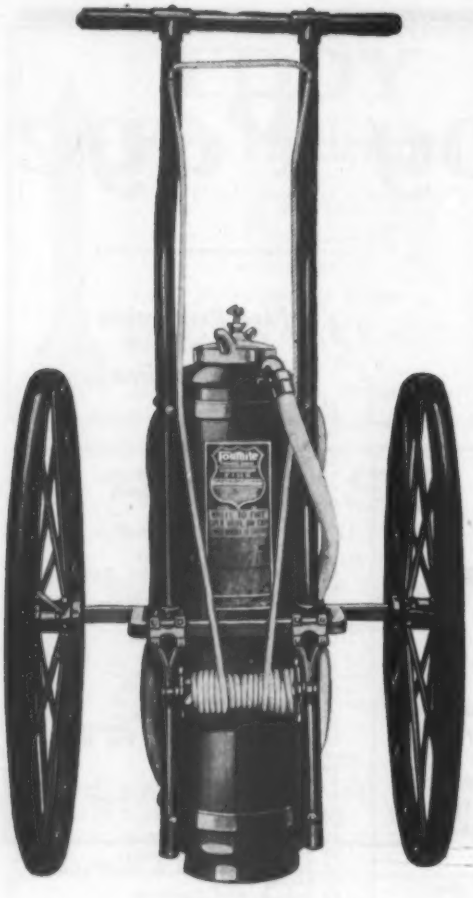

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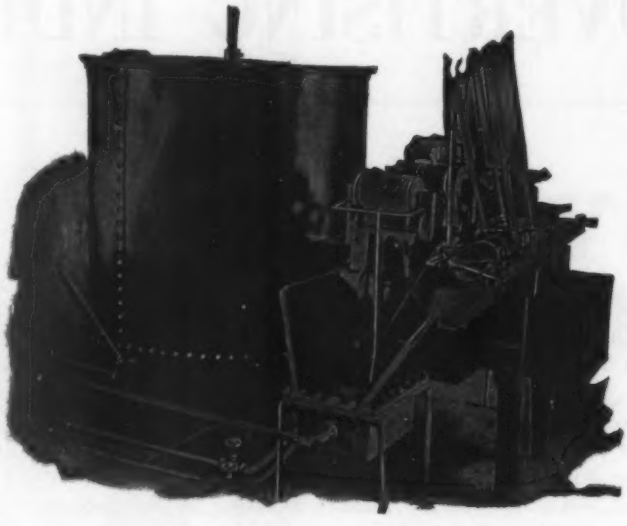

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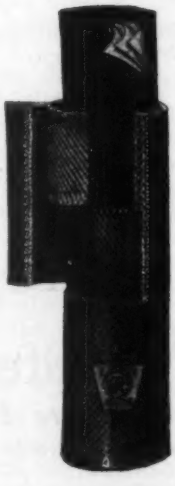

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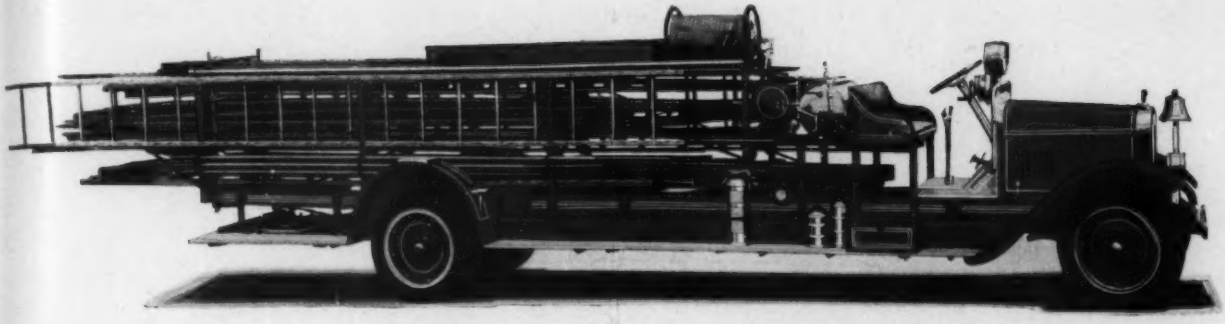

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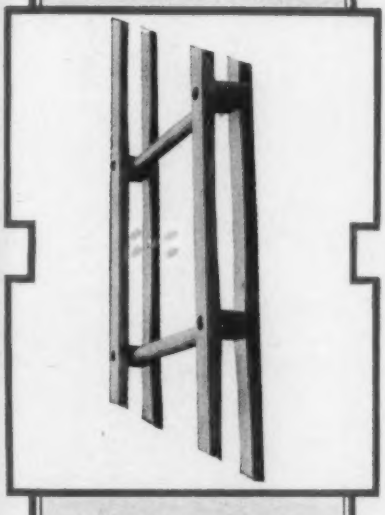

Note the effective simplicity of Pirsch Trussed Ladder construction. Bolts passing through both sections of the side rail and square ends of rung hold rung firmly in place. By removing these bolts a new rung can be inserted quickly and easily. This ladder can be climbed on either side.

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